THE LANCET.

VOL. I.] LONDON, SATURDAY, NOVEMBER 4, 1837. [1837-38.

LECTURES
ON THE
THEORY AND PRACTICE OF MEDICINE;
NOW IN COURSE OF DELIVERY AT THE
THEATRE OF ANATOMY AND MEDICINE, WEBB-STREET, SOUTHWARK.
BY
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&c., &c.

IRRITATION.—*The distinction between irritation and inflammation examined. Illustration drawn from the passage of a gall-stone, or a calculus. Cases simplifying the differences between irritation and inflammation. Bad effects of blood-letting in irritation. Inflammation, as distinguished from congestion: the latter belongs to the venous system. Remarkable case illustrating the effects of cardiac disease. Errors commonly entertained regarding inflammation. Phenomena in the frog's web commonly incorrectly described and explained. Re-union of divided parts. Examples.*

GENTLEMEN:—Quitting the interesting topics of my last lecture, I proceed to notice a subject, in relation to inflammation, of the highest practical interest,—that of *irritation*. The want of an accurate diagnosis between irritation and inflammation has been the cause of many fatal events in practice. I shall now, therefore, establish—

XI. *The Distinction between Irritation and Inflammation.*

But first I must give you an idea of what I mean by the word irritation. A gall-stone passes from the gall-bladder into the gall-duct. What is the immediate consequence? Inflammation? No; but pain and tenderness, and other symptoms which might lead the inexperienced, the uninformed, the unobservant, or the unwary practitioner, into the error of mistaking and mistreating the case for inflammation.

Similar remarks apply to the case of a renal calculus passing from the pelvis of the bladder into the ureter.

Such cases are cases of irritation, not of inflammation. It is true that inflammation may supervene, for *irritation* and inflammation are frequently allied together as *cause* and *effect*. Yet there is a real distinction to be drawn between them. Calculus in the gall-ducts, or in the ureter, may be a frequent, occasional, or permanent source of irritation, and of nothing more; but there may be the gradual supervention of inflammation.

On the other hand, there may be sources of irritation with scarcely any disposition to inflammation: the irritation of indigestible food in the stomach, and of the fæces, morbid in themselves, or too long retained in the bowels, are examples of this kind, of great practical moment, in their effects on the system, as will be particularly noticed hereafter.

I will merely mention now, that these cases frequently occur in the puerperal state; nay, that they constitute the majority of puerperal diseases; and that a mistake in the diagnosis may be a fatal one. If the case be inflammation—if it be peritonitis—blood-letting is our sheet-anchor, and to neglect it is to allow the disease to run on to a dangerous degree. If, on the other hand, the case be one of gastric, or intestinal irritation, blood-letting cannot be employed, as in inflammation, without the utmost danger. I shall recur to this important subject in a subsequent part of these lectures.

I wish, at the present moment, to bring before you another case of irritation contrasted with inflammation, of no unfrequent occurrence, and in reference to which a mistake in the diagnosis has equally proved fatal. It is the case of *fractured rib* compared with pleuritis. The symptoms are similar in each; acute pain of the side, dyspnœa, cough, &c.; nay, the pain is sometimes far more acute in the former case than in the latter, apparently demanding the use of the lancet still more urgently. Now, if you treat the case of fractured rib, which is one of mere irritation, as a case of pleuritis, your patient will sink under your remedies. This event has actually occurred.

Do not, therefore, imagine that I am painting, in terrific colours, an improbable catastrophe.

A medical friend, of the most robust form, and in the prime of life, rode a restive horse, which reared, fell upon him, and broke the third and fourth ribs of the left side of the thorax. Sixteen ounces of blood were taken on the succeeding, and again on the second morning after the accident. All seemed to be proceeding well. In the night, however, he was taken with excruciating pain of the side; opened a vein and bled himself largely into a wash-hand basin. This was repeated in the course of the next night. In all, my friend lost 120 ounces of blood. Had it been acute pleuritis he might have lost double that quantity in the space of four days with impunity and safety. As it was, stout and athletic as he was, he gradually passed through the series of symptoms which denote exhaustion from loss of blood; first with *reaction*, and then with *sinking*, and he fell a victim to the want of a just distinction between irritation and inflammation, and their appropriate modes of treatment.

Nor is this a solitary case. A similar example is detailed in THE LANCET (vol. xi., p. 94), as having occurred in *Bartholomew's Hospital*, under the care of the eminent surgeons of that establishment. It was a case of fractured ribs. The patient had been bled again and again. There was a question about a further blood-letting. A consultation was held, more blood was drawn, and the patient sunk from that moment.

But the case is so important, that I must introduce it to your notice entire:—

Arthur P——, a stout, muscular man, about 57 years of age, was brought to the hospital, early on Friday morning, in consequence of a fall from a scaffold, a few minutes previously.

On examining into the nature of the accident, the fourth, fifth, and sixth ribs were discovered to be fractured near their angles; their fractured ends having been pushed inwards, through the intercostal muscles, pleura costalis and pulmonalis, into the substance of the lungs; the air had, consequently, escaped into the thorax, and through the pleura and lacerated muscles into the cellular tissue, on the outside of the chest. The patient at this time complained of considerable tightness of the chest, with pain chiefly in the situation of the fractures. His pulse was, at first, weak and contracted, but in a very short time became full and hard. In addition to these symptoms he had cough, attended with expectoration, as well as severe pain in the head. The crepitation was, for the most part, confined to the integuments covering the left side of the thorax. He was bled by the dresser to eighteen ounces, and at noon he was ordered to lose twenty ounces more, to take a dose of house medicine occasionally, and to have a bandage applied loosely.

The blood drawn yesterday had a decidedly inflammatory character, and, after the abstraction of it, the patient expressed himself relieved. He has passed an indifferent night, and is much annoyed by a troublesome cough. Pulse quick; tongue slightly coated; bowels open. Ordered to be bled to eighteen ounces, and to take common linctus for the cough.

Noon. Still complains of pain about the seat of injury, but in a much less degree than before; the emphysema has not extended beyond its former boundaries; free from pain in his head, and on the whole expresses himself better. Pulse 90, full, and rather jerking; tongue moist. Ordered to lose eighteen ounces of blood immediately, and a similar quantity in the evening. Has passed a good night, and this morning we find him capable of talking cheerfully with a friend. Expresses himself free from all pain. Emphysema just the same; expectorates freely; pulse small and jerking, but very compressible. The blood drawn yesterday has not the slightest appearance of inflammation.

Mr. ——— ordered the patient to lose eighteen ounces of blood, considering, as we suppose, the state of the pulse as indicative of inflammation, and not as resulting from the loss of blood,—hæmorrhagic irritation,—as this state has been called. The dresser, however, perceiving what effect even the loss of a few ounces had, desisted from drawing any more. About two hours subsequently Mr. ——— saw the patient, and concurred with ——— as to the propriety of the further abstraction of blood; he therefore directed twenty ounces of blood more to be drawn. The pulse after this time became a mere flutter, and the man only survived a few hours.

On examination, the fourth, fifth, and sixth ribs were found to be fractured near to their angles; the left lung was considerably torn and collapsed; and into the left cavity about a pint of bloody fluid was found effused. The right lung was quite healthy, but appeared very light-coloured, from the almost total absence of blood in it. The left lung sunk on being placed in water; it appeared going into a state of hepatization. Here and there the pleura pulmonalis was detached from the lung by means of the extravasated air, and presented a tuft-like appearance.

The vessels about the heart were quite empty, neither was there any fibrine found in the ventricles, the whole organ being of a very pale colour. The right cavities bore no proportion to the left, the former being considerably larger, and the coats thinner than the latter.

The liver was of a very light colour. The spleen was found to be particularly tinged

with blood. On removing the skull-cap the dura mater presented a vascular appearance, but the pia mater and the substance of the brain were almost colourless. The man was observed to have a reducible inguinal hernia on the right side. On examining the contents of the sac it was found to be omentum.

In general, if accidents be treated as actual inflammation, *before* inflammation has supervened, the results will be deplorable.

Now, gentlemen, what do you think of the importance of the distinction between irritation and inflammation? I know that every one of you partakes of my own feeling, that it is one of vital consequence. I have many things to say to you on this subject; but they must be deferred to their proper places in this course.

In relation to inflammation, there is also another view to be taken of irritation; an *inflamed* ovarium may *irritate* the peritoneum, occasion the effusion of serum, and so prove a source of *ascites;* an inflamed testis may, in the same manner, excite hydrocele; the excited disease is to be cured, in some cases, only by subduing the exciting disease. Not only serum—liquid albumen,—but lymph, albumino-fibrine, and even the colouring matter of the blood, may be thus secreted. In an interesting case of cirrhosis, there were ascites, and over the surface of the rough liver, a thin layer of transparent lymph, nearly as red as the coagulum of the blood; there were, in addition, slight icterus, and œdema of the small intestines, probably from *congestion* in the hepatic vessels and minute gall-ducts. A source of irritation in the large intestine sometimes induces the secretion of mucus, so viscid that it retains the cylindrical form when passed per anum. In one example of this kind, shewn to me by Dr. Harwood, of Hastings, this mucous false membrane was tinged with the colouring matter of the blood. This appearance of *formed* mucus is common in constipation, from the use of purgative medicines, but especially from the use of warm-water enemata. I have never known it to be of the least consequence.

I must now lead you on to another interesting point, viz.

XII. *The Distinction between Inflammation and Congestion.*

I have already alluded, in a former lecture, to the distinction between inflammation and *congestion*. The former condition *begins* in the *capillary* vessels, and extends to the minute vessels. The latter has its *origin* in an impeded flow of blood through the *veins*. The minute veins, the true capillaries, and the minute arteries, become affected in their turn. But it is mere *impeded* circulation. Remove the cause, and the effect would cease at once.

I cannot explain this subject to you better than by drawing your attention to a case of frequent occurrence in practice; viz., diseased and contracted aortic or mitral valves. The flow of blood is arrested in its course through the left side of the heart; then in its course through the lungs; then in the liver; then in the intestine; and, lastly, in every exterior part of the body.

I must particularly beg your attention to the details of an interesting case:—

Mr. C———, aged 63, a barrister, called on me on the 10th of September, 1835. He had returned from the circuit, during which his friends had observed his altered appearance. I was struck with his *breathlessness*, small indistinct pulse, pallor, thinness, &c. I appointed to see him at home.

On the next day I saw Mr. C—— at his own house. There were breathlessness on the slightest exertion, augmented impulse of the heart, without either distinct second sound, or *bruit de scie*, slight *anasarca*, and slight *icterus*.

The progress of the case was rapid. The breathlessness became urgent; there was a distinct rattle over the posterior right side of the thorax; the left ventricle beat rapidly, with considerable impulse, and without distinct second sound, or bruit; there were some cough, distinct icterus, and augmented anasarca; the jugular veins were turgid; the pulse was small, irregular, indistinct.

To these symptoms hæmoptysis succeeded. The only position which could be sustained was the erect. The cough became troublesome. The breathlessness, the rattle on the right posterior side of the thorax, the rapid forcible beat of the heart, without second sound, or bruit, the small, indistinct pulse, the icterus, the anasarca, continued, with occasional sickness.

Gradually the cheeks became cool, the beat of the heart less forcible, the pulse less indistinct, the posture less raised; the extremities cold and clammy, and the patient sank very slowly during several days.

Examination.—The organs were examined thirty-six hours after death, on September 29th, 1835.

There were slight icterus and anasarca.

The head was not examined.

The thorax.—The *left* cavity of the pleura contained one pint of sero-sanguineous fluid.

The costal pleura was very vascular; there were no adhesions, except between two contiguous portions of the lung, and of this to the pericardium. The *right* cavity of the pleura was obliterated by adhesions.

The *trachea* and bronchia were filled by frothy bloody mucus. The bronchial tubes were dilated, and their lining membrane redder than natural.

Both lungs, but especially the right, were gorged with bloody fluid, so that only the

upper portion gave the healthy crepitus on pressure between the fingers. A portion of the lower lobe of the *right* lung presented a circumscribed apoplexy, of the size of an egg; similar but smaller apoplexies were found in the middle lobe, and in the upper lobe of the *left* lung.

The two layers of pericardium adhered by means of coagulable lymph, which admitted of being readily torn and stripped off. This membrane was very vascular within; and, on its exterior surface, it was loaded with adeps and serum. The *heart* was considerably enlarged; the *right auricle* and ventricle were dilated and thickened; the auriculo-ventricular and pulmonary valves free from disease; the pulmonary arteries and their branches appeared enlarged; the *left auricle* was much dilated and hypertrophied; the auriculo-ventricular valve was very much thickened, of the firmness of cartilage, and admitted one finger only; the *left ventricle* was slightly enlarged and hypertrophied; the *aortic* valves were ossified, and rigidly immoveable, and their orifice so contracted as not to admit the little finger.

The abdomen.—The peritoneal cavity contained no fluid. The *liver* was small, and its surface granulated. It was shown to Mr. Kiernan, who stated that it was in the second stage of hepatic-venous congestion. The gall-bladder was full of dark-coloured bile; its ducts free.

The peritoneum covering the intestines was deeply congested. The intestines themselves, from the middle of the jejunum to the rectum, were highly congested—the valvulæ conniventes being of a deep purple hue, and presenting numerous small patches of ecchymosis. The spleen, pancreas, kidney, &c. were healthy.

It is impossible that morbid appearances should follow in a more distinct order, or account more lucidly for the symptoms during life. I know of no case on record so illustrative of the effect of obstruction of the circulation, upon the *arrière* part of that circulation.

The breathlessness is accounted for by the condition of the valves of the aorta and the left auriculo-ventricular valve. The smallness and indistinctness of the pulse by the former. The turgid jugulars by the impeded circulation, propagated from the lungs to the right side of the heart.

The impeded flow of the blood through the aortic and mitral valves, led to *congestion* in the lungs, and this amounted to such a degree as became true "*apoplexie pulmonaire*;" in consequence of this impeded circulation in the lungs, we have congestion of the hepatic vein in its second stage; as a further consequence of hepatic-venous congestion, we have congestion of the veins of the intestine, so remarkable on the post-mortem examination.

The congested state of the liver led to the icterus, and to the hæmorrhagic state of the intestine. That of the vena cava to the anasarca.

It is impossible to imagine a *series* of phenomena more distinctly connected; the smallness of the pulse, with the contracted aortic valve; the congested lung, with impeded circulation through the left side of the heart generally; the impeded flow of blood through the right side of the heart, and the turgid jugulars, with the congested lung; the congested hepatic vein, with the impeded flow of blood through the right side of the heart; the progressive, though *arrière* congestion of the hepatic veins, with icterus, and of the *roots* of the vena portæ, in the intestine, with that of the hepatic vein.

The subject is further illustrated by this figure:—

You will observe, by the direction of the arrows, that if the aortic, or mitral valve, be diseased, there must be an impeded flow of blood through the corresponding ventricle, or auricle; then in the lungs, with hæmoptysis, or *apoplexie pulmonaire;* then in the right side of the heart; then in the hepatic vein and liver—hepatic venous congestion; then in the intestine, with the purple hæmorrhagic state; lastly, in all the exterior parts of the body. This is a subject for you to reflect upon. Words cannot convey all the interest which attaches to it: you must think of it, and feel it.

The *circulation* of the blood is usually described as being *double*, systemic, and pulmonic. You will observe that it is, in reality, only *single*, the systemic and pulmonic circulations being only *one*. The blood flows from the left ventricle through the system, and through the lungs, before it arrives at the *same* ventricle again.

This is not an idle remark, of no practical or pathological value. It is *only* by viewing the circulations in their true light, that we can trace, as we have done, the influence

of an impeded flow of blood in *one* part of its course, upon *every* part comprised in *both* circulations.

It is only in this manner that we can find the rationale of all the symptoms in disease of the heart,—of the congestion of the lungs and of the liver,—of the face, and of the extremities.

These effects of an impeded flow of blood in one part of its double course should be borne in mind, if ever the aorta should be again tied. Unfortunately, in Sir A. Cooper's case, the condition of the lungs, the liver, the intestine, are not given. During life the patient "appeared to have an uneasiness of the heart, as he kept his hand upon the left breast." In a case of contracted aorta, opposite the *canalis arteriosus*, which occurred to Mr. Winstone, the right ventricle was ruptured.

We have thus a true idea of congestion, as it occurs in the lungs, the liver, the intestine, from the interrupted course of venous blood. Doubtless, congestion occurs under various other circumstances; the spleen appears to be congested in the cold stage of intermittent, and in purpura. In typhus we have splenization of the lung and congestion of the spleen.

I shall now advert to one or two

XIII. *Errors in regard to Inflammation.*

1. It has been supposed by many writers that there is a series of bloodvessels which are so minute as not to admit the blood-globules; they, therefore, carry the serum only. This is the case in the tunica conjunctiva of the eye, and other membranes destitute of colour. All this is a mere and unfounded hypothesis. There are no such serous, globule-less vessels.

Take the web of the frog, choose the palest, and what appears to be the most bloodless portion of it, and place it under the microscope. You will see myriads of capillary vessels, along which the blood with its globules flows continuously. Inflame this web, and observe it with the naked eye; it has become red; it now possesses, according to the authors of the hypothesis, vessels which it did not before, and which convey the globules as well as the serum of the blood; look at it under the microscope, and you will find that the real and true change is, that the capillary vessels are somewhat enlarged, and crowded with stagnant blood-globules, which, from their augmented number, give the reddened hue to the part.

In a word, single globules, flowing along with the serum of the blood, do not impart a redness detectible by the eye; it is accumulated globules, in enlarged, or larger vessels, which communicate this colour. It is their accumulation which constitutes the difference in the colour of a part, otherwise pale, white, or transparent, as it becomes affected with inflammation.

In a word, the true doctrine of inflammation is this,—we first observe the globules of the blood becoming *adherent* to the sides of the *capillaries*, which have undergone some *physical* change from the influence and operation of the *cause* of the inflammation; then the globules, thus arrested in their course, accumulate in number; the capillaries become distended, enlarged; the *obstruction* excites the *minute arteries* to increased action and enlargement, just as the ligature of an artery for aneurysm induces enlargement of the *collateral* branches; the *sum* of the circulation through the part is augmented; the *veins* are probably enlarged in consequence, though this has not been ascertained.

The action of the more distant arteries is augmented. Compare the pulse at the wrist in the inflamed and uninflamed hand of the same patient; you will find the pulse of the inflamed hand stronger than that of the other The action of the heart itself is augmented. The blood has acquired the property of forming buff, and assuming the cup-shape when drawn from the vein.

In this manner all the phenomena are explained, without the necessity of supposing an order of vessels which does not exist.

2. The next error which has prevailed is, that by applying various stimulant substances to the web of the frog, you can affect the capillaries, and induce in them, some say augmented, others, diminished, action; and, consequently, prove that they are susceptible of those changes, and establish, as a further consequence, that they are endued with irritability or other vital powers. All this, too, is hypothesis. Alcohol, or a solution of salt, applied to the web of a frog, gives pain, induces consequent muscular action in the animal, obvious or suppressed (for I have observed both), corrugates the cutaneous textures, and induces a *physical* change in the internal surface of the capillaries. How is it possible, in such a complicated phenomenon, to ascertain distinctly the effect of a stimulus on the *irritability* of one set of vessels only? Accordingly we find two sets of philosophers disputing whether there be increased or diminished action of these vessels; and two other sets disputing whether these very vessels be really vessels at all, or only mere canals.

It is a relief to take refuge from such discrepancies of opinion, and without hypothesis, without preconceived notions, to try the experiment, and observe for ourselves; and this you shall do the first leisure evening. We will, with the aid of the microscope, first observe the different orders of vessels in the web of the frog, and then watch the effect of alcohol, or some other stimulus. You shall judge for yourselves, and we will

compare what *you* see with what *I* have written on this interesting subject, in my "Essay on the Circulation of the Blood." In this, and in every instance, I wish you not, as formerly, to be imbued with a set of opinions of a certain teacher,—but with a series of *facts* and *observations* which you have made your own—by observing for yourselves. The thing *I* would teach *you*, is—*to be observers.*

I shall conclude this subject by adding a paragraph from my "Essay on the Circulation," page 161 :—

I have always distrusted the experiments in which irritating or stimulating substances have been applied to the web of the frog, in order to determine the question of irritability of the capillary vessels. This kind of experiment involves too many causes of complication to admit of any conclusion being drawn from them, respecting either the nature or function of the minute and capillary vessels in health, or their modifications in disease. The first effect of applying an irritating substance to the web of a frog, is the infliction of fear and pain. Fear singularly arrests the flow of blood. Pain alone would, probably, immediately accelerate the circulation; but, in fact, the pain inflicted immediately leads to another effect,—that of struggling. This, like every muscular contraction, produces various effects upon the circulation in the minute and capillary vessels. The course of the blood becomes arrested, or oscillatory, and variously irregular.

The next effect produced by this experiment is, according to the nature of the substance applied, a various degree of constriction or corrugation of the external membranes of the web itself. This will induce various impeded, or even retrograde, movements in the globules of blood. In the next place, there can be no doubt that the application of a stimulant to the web will variously affect the textures of the subjacent minute and capillary vessels, and induce proportionate changes in the motion of the globules of blood. Lastly, there can be no doubt, I think, that the influence of the application of some substances, extends even to the contents of the minute and capillary vessels. How shall we, in the midst of a question so complicated, disentangle and isolate any effect of a purely vital kind upon the muscular and contractile texture of the vessels? How shall we ascertain whether this individual texture be excited or debilitated? And if it be impossible to determine the immediate effects of stimuli, how shall we distinguish such as are secondary, and constitute morbid processes, viewed as mere affections of the vital properties?

Still the experiment of applying stimuli to the web is one full of interest, if we confine ourselves to the mere observation of facts. On a view of such an experiment, we are led to consider other actions and relations besides those that are vital. Indeed I think it very obvious, that some of the effects of irritants applied to the web of the frog, as well as other living animal membranes and textures, are of a *physical* character; others may be of a *chemical* nature. The operation of most of the causes of inflammation are of the former order. Mechanical injuries, heat and cold, alcohol, ammonia, the muriate of soda, &c., appear to possess an agency of this kind. Under their influence the blood frequently becomes stagnant,—frequently extravasated. The operation of inflammation is apparently one not so much excited by these agents, as set up by Nature to remedy their deleterious effects. Stagnation and extravasation are sufficient to explain the tension and pain in the part subject to the action of causes of inflammation.

The immediate effect of the causes of inflammation is plainly physical, as well as vital. If it be vital at all, inflammation itself is that process which is set up to remove the effects of irritation, and does not consist in the mere enlarged or debilitated condition of certain vessels, or the impeded motion of the blood contained in them. To be satisfied of the first of these propositions, we have but to read the detail of experiments given by Dr. Hastings, or to repeat and observe the experiments themselves.

I have never been able to detect any phenomenon from the effect of irritants applied to the web of the frog, which would lead to the idea of increased or diminished action of the minute or capillary vessels. The early effect of alcohol is stagnation of the blood; this stagnation may be confined to either the upper or in the lower layer of vessels, accordingly as proper precautions may be taken in applying the stimulus to the upper or under surface. I have also repeatedly witnessed a singular phenomenon: in a large vein, the globules have partly adhered to its internal surface, whilst, in its central part, they have flowed on with more or less regularity. I have also seen a considerable stagnation cease all at once, and yield to a free flow of the globules of blood.

These facts naturally lead to the conclusion that the internal surface of these vessels is particularly affected.

The application of a solution of the muriate of soda is more prompt, and still more remarkable in its effects, than that of alcohol. Stagnation, and a deepened colour of the blood, are simultaneously produced. This fact would lead us to imagine, that the stimulus penetrated even into the internal vascular canals.

XIV. *On the Re-union of Parts which have been Separated from the System.*

It has been a question, whether a part once entirely separated from the system

could be reunited, and that by organization. Mr. Hunter transplanted the spur of a young cock to its comb, and the testes into a distant cavity. In the human subject the tooth has been transplanted; lymph and coagulum of blood unite to contiguous parts, and become organized. I need scarcely recall to your recollection the interesting facts presented by the engrafting of trees. The question is, whether, in animals and in the human subject, solid parts once separated and transplanted, ever unite by vascular connections, by organization; whether they might be injected, &c.

A story is told,—by I know not what ancient surgical writer,—of two combatants, one of whom bit off the other's nose, who, before he resumed the battle, took it up out of the gutter and threw it into an apothecary's shop, which luckily was situated hard by. I forget which of the parties won the battle; but I remember that the nose was replaced, and united perfectly, which is the point in hand. Whether it united by a vascular union was not, I believe, ascertained.

I *know* that a little boy cut off the tip of his finger, and that his mother, a most intelligent person, immediately took it up and reapplied it, and that it adhered. It remained without sensation, but apparently vascular.

I need not detain you by any remarks on the Taliacotian or Rhinoplastic art. There is nothing wonderful in the union of parts whose organization, and continuity with organized parts, have never been entirely interrupted. The nose, the lips, &c., have thus been restored, especially by M. Dieffenbach, and much deformity obviated. Sir Astley Cooper has thus been enabled to remedy fistula in perineo.

LECTURES
ON
MATERIA MEDICA AND THERAPEUTICS;
NOW IN COURSE OF DELIVERY
AT THE
WINDMILL-STREET SCHOOL OF MEDICINE
BY
GEORGE G. SIGMOND, M.D.

TONICS (continued).— *Preparations of iron. Effects of the subcarbonate of iron in cases of cancer. Experiments of Mr Carmichael. Efficacy of the subcarbonate in cases of tic-douloureux. Experiments of Mr. Hutchinson and Dr. Elliotson. Influence of the carbonate of lead on artisans. History of the chalybeate waters of England and of other countries. Medicinal properties of the tinctura ferri muriatis. Effects of the sulphate of iron considered.*

GENTLEMEN:—In my former lecture I stated to you the nature of the preparation formerly called carbonate, sub-carbonate, and rust of iron, but which, in our last edition of the Pharmacopœia, is denominated, from its containing one-and-a-half proportion of oxygen, the sesquioxide of iron. I shall now examine into the claims that it possesses to our attention, as a therapeutic agent, and the circumstances under which it has attracted the consideration of medical practitioners in the cure of several diseases. It is now about thirty years since this drug became the subject of very considerable inquiry, in consequence of the publication of a very valuable work by Mr. Carmichael, entitled, "An Essay on the Effects of Carbonate of Iron, and other Preparations of that Metal, in Cancer." In this volume he carefully reviewed the opinions both of the ancients and the moderns upon the nature of this formidable disease. After minutely examining all the different theories that at various periods have been advanced, he adverts to the hypothesis, which assigns to cancer a life independent of the parts on which its fearful ravages are committed. Such a doctrine was promulgated in the year 1600, in the "Bibliotheca Anatomica," in which it was affirmed that a multitude of small worms were discoverable by the microscope in ulcerated cancer, and that they were the sources of the disease. Justamond's opinion was also referred to, who believed that the cancer was formed by insects, whose germina were imbibed by the lymphatic vessels; and that whilst they remained in an inanimate state, neither pain nor uneasiness were felt, but that owing to some accidental violence the principle of vitality was developed, and the result was the ulcerated state. It is likewise mentioned, that such an opinion was prevalent in various parts of the Continent, and that Dr. Moseley, in his work upon tropical diseases, says, that at the Bay of Honduras, a true cancer, which is called the "bay sore," is endemic, and that the Indians believe it to be produced by a large fly depositing its eggs in the flesh.

These attempts to explain the proximate cause of cancer were disregarded, and had almost sunk into oblivion, when Dr. Adams revived them. He thought that hydatids, possessing a contractile power, contained in cysts, existed in the yellow greenish fat. Mr. Carmichael, after a very candid examination of the opinions of Dr. Adams, arrives at the conclusion that he agrees with him in the fundamental part of his theory, the independent life of cancer; but he thinks this life to be seated in the substance resembling cartilage, with its annexed bands or roots, and not in the fatty substance. This extraneous mass he compares to the vegetable parasites, which are produced upon those parts of vegetables whose organization is impeded, and, from their living powers being destroyed, are in a state of decompo-

sition. This extraneous mass, he thinks, possesses a low degree of vitality, and merely to be entitled to the term animal fungus, as he thinks it to be decided that there is, in the higher order of animals, which have red blood, a peculiar salt of iron capable of destroying the simpler animals possessing colourless blood; he attributes the depredations committed by these hydatids, or fungi, to a deficiency of oxide of iron in the blood, or to an excess of inflammable principle, capable of keeping that metal in a low degree of oxygenation, or to incipient decomposition of any part, from injury to its organization or deficiency of vital power. I cannot, of course, enter into a detailed view of the evidence he adduces of the independent vitality of cancer; but I would strongly recommend it to your perusal, as well for the ingenuity it displays as for the great practical information on cancer that it affords. Having, satisfactorily to himself, and to a very large proportion of his readers, established his opinion upon the nature of the disease, he inquires into the uses of iron in the system, and gives a very elaborate detail of the ends which Nature has designed in furnishing the bodies of warm-blooded animals so abundantly with this metal; and amongst these is the prevention of the production of the parasitic animals, by the property it possesses of destroying the lives of animals having colourless blood.

Iron certainly acts as a poison on several animated beings, and Mr. Carmichael gives us the result of his experiments with the salts of iron on earth-worms, about two inches in length. He found that the carbonate killed in three hours, the phosphate in an hour, the arseniate in twenty minutes; but arsenic, uncombined with iron, did not produce the same effect in less than two hours. The oxyphosphate of iron proved destructive in six minutes, the suboxyphosphate in three minutes. He accounts for the death of leeches, if they are not forced to disgorge the blood with which they are glutted, to the presence of the suboxyphosphate which circulates in the vessels. He likewise draws attention to the vermifuge power of iron, and certainly the entozoa are often expelled on the administration of salts of iron, and uniformly dead. Entertaining these views, Mr. Carmichael gave a fair trial of his favourite remedy, and has furnished us with a detail of numerous cases, classified under three heads: those which were cured by the preparations of iron, those which were alleviated, and those which were neither cured nor alleviated; forty-one cases are narrated, which were either cured or alleviated, and seven in which no beneficial effects were witnessed.

This subject excited very deep interest. A committee was formed for investigating the nature and cure of cancer, and a series of queries was drawn up with a view "of co-operating in the laudable endeavour to lessen the mass of human misery, by calling for the assistance of others, and by exerting themselves to obtain a remedy for a most painful and dreadful disease, against which all the medicines and methods of treatment hitherto proposed and tried have been found unavailing." Many distinguished men in the profession who, although they could not arrive at the conclusion that carcinoma was an animal fungus, became deeply interested in the subject, and gave a fair trial to carbonate of iron, and the other salts of the metal. I am not aware that any denial was given to the assertion, that iron is injurious to all animals whose blood contains no red particles. Yet I cannot but believe this is not the case, so plentifully is the metal distributed all through Nature; so universal in the mineral kingdom, so frequent in the vegetable and animal, that it seems to be highly improbable it should be so decidedly destructive. The doses administered were various; from five to ten or twelve grains every three or four hours were ordinarily given; in some instances the carbonate of iron, very finely levigated, was applied twice in the course of the day, whilst some ferruginous preparation was exhibited internally. It was chiefly in ulcerated cancers that the iron was found serviceable, and cases of cancerous ulcers of the face, lip, nose, uterus, and other parts of the body are detailed in several of the periodical publications of the day; but the claims of the carbonate, or any preparation of iron, to the character of a specific, were after very fair examination disallowed. That in various states of ulceration wearing a very malignant and formidable aspect, this remedy is most advantageous, daily practice fully confirms; that in carcinomatous ulcerations the diseased parts very frequently acquire an aspect infinitely more healthy is also generally allowed; that we may very often, in the most unpromising cases of open cancer, obtain respite from the progress of disease, is all that we can expect from this remedy; which deserves, therefore, our attention and our knowledge of the circumstances that have yet been made known with regard to its exhibition.

In the year 1820 Mr. Hutchinson gave to the world the result of his observations on the cure of tic douloureux, for which he had administered, with very great success, the carbonate of iron. To the employment of this remedy he had been led from a reflection upon the curative powers of arsenic, which, if its deleterious agency was not such that it cannot be pushed beyond a certain quantity, would be more frequently administered, and with every probability of uniform success. He was led to inquire whether some mineral, possessing nearly the same action upon the system, without producing its noxious influence, might not

be found in carbonate of iron; and his expectations of good results were increased by its utility in many diseases arising from debility and a want of proper action in the digestive organs. He enters, in the work he published, upon the history of this agonizing malady, and discusses the measures that had been fruitlessly taken for its cure. He then brings before his readers six cases in which the iron had been found efficacious. The preparation which he has found serviceable, under different states of the constitution, and various periods of its duration, is this medicine, in doses of two scruples, or even a drachm, repeated two or three times a day; and he adds, that used to this extent, it removes several other affections over which it had been supposed to exert no power. Since the period at which Mr. Hutchinson gave his useful observations to the public, the carbonate of iron has been very largely tried by the profession, and occasionally with the happiest results.

You will read in THE LANCET for 1832, a letter from Dr. Hutchinson, physician to the General Hospital near Nottingham, which he thought it necessary to write in consequence of a clinical lecture delivered by Dr. Elliotson, on the subject of neuralgia, in which he imagined the learned professor discourages the employment of the medicine. In this letter he says,—"Ninety-eight unquestionable cases of tic douloureux, the full reports of which I have now before me, many occurring in the practice of my late father and myself, and others reported to us by medical practitioners of the highest respectability and attainments, all of which were cured by the use of the carbonate of iron, most after the persevering employment of other remedies, distinctly prove the fact that the disease is generally not only susceptible of alleviation, but that it may usually be cured." The cases to which he alludes are the result of the successful application of this remedy.

Dr. Elliotson's observations are practical, and will, I think, be assented to by all those who have tried the carbonate of iron. It is "one of the best remedies in this disease, but by no means a specific, and by no means so successful, I think, as in some other nervous complaints." The case which called for the observations of Dr. Elliotson, is one of peculiar interest. You will find it in THE LANCET of December 8th, 1832. My attention was directed to his observations more particularly some time since, in consequence of having under my care at the *Charing Cross Hospital*, a journeyman printer, whose symptoms very much corresponded with those that are there detailed. The idea suggested itself to me that the symptoms were produced by the man's employment, in which leaden types were constantly used.

The influence of carbonate of lead is often very severely felt by the compositors and the workmen in printing-offices; it forms very quickly upon the types after they have been washed, so that the person who distributes the types in their proper places in the cases is very frequently severely affected. Sometimes it forms upon the type in the composing-room, owing to the action of air and of moisture, which latter is often sufficient to cause adhesion of the types. Certainly many nervous affections without colic arise amongst those whose occupation exposes them to the action of lead, though not to the extent that Dr. Lambe has stated. In the case to which my own practice was directed, numbness had commenced in the fingers of the hand, whilst the thumb was unaffected, and the man afterwards suffered agonizing pain in his hands, his arms, his neck, which might very justly be called neuralgic. The treatment I pursued was the same which I should have followed in an individual poisoned by lead,—castor-oil, opium, and enjoining a fatty diet, which soon proved successful.

Dr. Elliotson has, with great zeal and ability drawn the attention of the profession to several important medicinal agents, and amongst these he has used with great success in several of the disorders which more immediately indicate a morbid state of the nervous system, the carbonate of iron. Sydenham was a great advocate for the use of the rust of iron in nervous and hysteric diseases, and prescribed some chalybeate medicine to be taken for thirty days; he gave the preference to steel in substance, or in a syrup prepared by infusing filings of steel or iron in Rhenish wine, without fire, till it is sufficiently impregnated, and afterwards straining it off, and with a sufficient quantity of sugar boiling it to the consistence of a syrup; but he enforces a caution which is sometimes neglected; and I have seen, from want of attention to his precept, considerable determination to the brain produced by it; he says, "it must be noted here that chalybeates, in whatever form or dose they are exhibited, do sometimes occasion great disorders in the senses both of body and mind, not only in the beginning, which happens to most persons who take them, but during the whole course of their continuance. Now, in this case, the course is not immediately to be interrupted, but that the patient may bear them better, a proper dose of laudanum must be given every night in some hysteric water." In 1827 a very interesting paper appeared in the "Medico-Chirurgical Transactions," by Dr. Elliotson, in which he shows that the dose of this medicine has a much wider range than has been thought; and certainly the doses he employed had been thought by Cullen too large, when he practised; for he states that the rust of iron had been given

in the quantity of six drachms in the course of the day, but that he had not seen any one capable of bearing more than a third of that dose. Dr. Elliotson treated several cases of chorea with this remedy; paralysis agitans and traumatic tetanus have likewise yielded to this treatment, and the doses have been large; he has found that even half-ounces were seldom productive of any inconvenience. Of the two cases of tetanus (in the fifteenth volume of the "Medico-Chirurgical Transactions") treated, one of them, as the pulse was not above 76, would probably have been cured without any remedy; in the other the pulse was 136.

Many very valuable precepts on the use of carbonate of iron are to be found in the clinical lectures of Dr. Elliotson; and though no advocate for large doses myself, and believing that the carbonate of iron often passes unchanged through the stomach and the bowels, yet the greatest praise is due to that professor, for his unwearied inquiries upon this important subject. You will occasionally find cases in which his practice has been imitated, and the results narrated in the periodical journals, and you will observe instances where evident bad effects have been the result of the large quantities given, although the disease has been cured by it eventually. Dr. Elliotson thinks that iron may be administered where headach, foul tongue, and torpid bowels are present, but that it is prudent in such cases to abstract blood and open the bowels.

Messrs. Dumas and Edwards have made various experiments to ascertain the efficacy of iron in cases of poisoning by metallic salts. The acetate, the sulphate and carbonate of copper, and the bichloride of mercury have been injected into the stomach of dogs for the purpose of ascertaining whether iron, exhibited at different intervals, would not act as an antidote. The experiments uniformly proved that it possesses the power that had been ascribed to it. In the case of the sulphate of copper the iron was found to be rendered much more active by the addition of a little vinegar.

The protocarbonate of iron exists in a number of mineral waters, a pint of such water seldom containing more than a grain or two of iron, this homœopathic quantity producing the most marked good effects in many chronic diseases. Many of the mineral waters, both on the Continent and in this country, owe their efficacy to the presence of such minute quantities of iron as scarcely to be detected by the usual tests, and almost to elude the nicest chemical research. This is the case with the thermal waters at Bath, where the impregnation with iron is only discoverable when fresh from the spring. The ferruginous deposit takes place soon after the water has been allowed to stand, and, indeed, when it is cool, it appears to hold none in solution. Sir George Gibbs was unable to detect the chalybeate impregnation, either by prussiate of potash, by tincture of galls, or any other reagent, after a very short time had elapsed. Some of the mineral waters that were formerly much prized in the neighbourhood of London, but whose site is almost unknown at present, such as those of Islington and Hampstead, owe their medicinal virtues to the iron dissolved in them. Great incredulity was, at one time, manifested as to the power of springs in which such minute quantities of minerals are found to exist. Heberden, Saunders, both thought little of the waters of Bath, though the latter physician, in a third edition of his "Treatise on the Liver," retracted or modified his opinion. When we find such minute ingredients in large quantities of fluid, acting in the extraordinary manner they do, we cannot be so much surprised that the carbonate of iron, however unappreciable the quantity contained may be, powerfully modifies the effects of mineral waters; thus, ten grains of sulphate of magnesia diffused in a quart of water, administered in a draught of six or eight ounces, will act more efficaciously than an ounce of salts in a smaller quantity of water. It is in a state of minute division that iron, gradually introduced into the system, acts with determined efficacy in restoring diminished energy to the constitution; and I believe, with John Pearson, that the beneficial operation of chalybeate springs is entirely owing to the extreme diffusion of the medicine, and that its medicinal efficacy is often frustrated by overdosing it. It is a well-known fact, that the artificial Carlsbad water rather debilitates the system than improves it, if the very minute proportion of iron, which Nature has dissolved in the original spring is omitted. Artificial mineral waters which have been formed, in consequence of most elaborate analysis of springs, will completely supply the place of the natural water, if carefully prepared, and if the most minute ingredient be uniformly added.

Very few thermal mineral waters contain iron, amongst these Bath (which likewise, according to Mr. Cuff, has in its ingredients iodine), also Chaudes Aigues, Rennes in France, Schenkznach in Switzerland, Courmayeur and St. Didier in Piedmont; so that the most favourite of the hot-springs of Germany and the Pyrennees are not be classed as chalybeates; as tonics they are, therefore, much inferior to those I have just named. The total amount of ingredients in a pint of the King's Bath water, which is the spring most strongly impregnated, is fifteen grains; these consist, according to Mr. Phillips, of muriate of lime and magnesia. After having paid attention to the different thermal waters of the Continent, it appears to me that most of the English families I have found at Aix-la-Chapelle, amongst the Pyrennees, and at Lucca, seek-

ing health from the use of the warm springs of those neighbourhoods, would have been much more benefitted by the use of the Bath waters. It is a source of great regret that they are now so little attended to, and that although they are, as ever, worthy the high reputation they once enjoyed, they are almost sunk into oblivion, notwithstanding, too, some of our very highly distinguished physicians have written upon their value, amongst these, Dr. Barlow, whose practical, as well as scientific knowledge, claim from his profession the highest respect and esteem. In diseases which are marked by deficient energy in the constitution, these waters afford the most decided advantage; and although, doubtless, they have been sometimes injudiciously employed, they afford the strongest proofs of powerful action. Of their external use in paralysis, I may hereafter have occasion to speak. Dr. Daubeny has given us one of the most valuable papers on the present state of our knowledge with respect to mineral and thermal waters; it was read at the meeting of the British Association for the Advancement of Science, at Bristol; it is very valuable in every point of view; there are some very curious observations with regard to the red ferruginous matter which is observed floating on the surface of some thermal springs, relative to which he had called the attention of the scientific world in a volume of the "Linnæan Transactions," and for which he had attempted to account; but Professor Ehrenberg, of Berlin, has ascertained that this red matter is composed of the outer sheaths, or coverings, of little infusorial animalcules, which appear to possess the power of secreting oxide of iron, as well as silica, and hence thrive only in chalybeate waters, which afford them the materials for the coat of mail which invests their softer parts. Thus, as Dr. Daubeny observes, whilst one class of beings requires for its existence the presence of sulphur in such a state of combination, as is found to be absolutely destructive to other kinds of life, as is the case in some sulphureous springs, another class secretes iron, a substance equally unsuited for the nourishment of the great majority of animals, as if it were intended that there should be no class of inorganic productions which did not minister to the wants, and favour the production of a corresponding order of organised creatures.

Iron is supposed by Sir Humphrey Davy to form the ochreous deposit so frequent in hot springs, that it exists in the state of a protoxide, but passes into that of peroxide upon exposure to air. Iron abounds so much in the bowels of the earth that chalybeate springs are the most common of the mineral waters. This metal is either in the state of excess of carbonic acid, or in the simple form of carbonate; in the former state they are called acidulous chalybeates, as those of Spa, Pyrmont, Bussary, &c. The spring of Vichy, in France, has a larger proportion of iron than any other. The mineral waters of Baleston and Saratoga, in the United States, have, however, the largest quantity known. All springs thus impregnated are useful in most diseases of debility, in dyspepsia, hypochondriasis, and hysteria, in paralysis, chlorosis, leucorrhœa, worms, in diseases of the kidneys, the bladder, in papulous eruptions of the skin; they are injurious in a plethoric state of the system, in consumption, in inflammations of internal viscera, in acute rheumatism, in dysentery, in consumption. If they produce headach, vertigo, anxiety, pain in the stomach and bowels, or spasm, they are to be avoided. Their operation is facilitated by exercise and attention to the state of the bowels. The quantity should always be regulated with some nicety. They are too often taken in larger draughts than prudence dictates.

The tinctura ferri sesquichloridi was lately known to us under the name of tinctura ferri muriatis; it is formed from the permuriate, or oxymuriate, of iron, as it was formerly called, or sesquichloride of iron of the Pharmocopœia, and is composed of one-and-a-half proportion of chlorine, and one of iron; it is soluble both in water and in spirit. The tincture of the Pharmacopœia is one of the best and most agreeable forms of administering iron, nor does it undergo any of those changes which so often render medicinal agents uncertain in their effects. It has long been admitted into the officinal prescriptions. It is thus made:—Take of sesquioxide of iron six ounces, hydrochloric acid a pint, rectified spirits three pints, pour the acid upon the sesquioxide of iron in a glass vessel, and digest for three days, frequently shaking; lastly, add the spirit, and strain. In this preparation mutual decomposition of the sesquioxide of iron and the hydrochloric acid takes place, the hydrogen of the acid unites with the oxygen of the oxide, and water is consequently formed, whilst the chlorine of the acid unites with the iron to form the sesquichloride of iron. The tincture thus obtained is of a reddish-brown colour, its taste is extremely austere and acid, it contains some hydrochloric acid, which is apt to corrode the teeth, it gives a peculiar sensation of astringency to the throat and the palate, it has an æthereal smell; a fluid ounce contains about thirty grains of iron, and its specific gravity is about 0.992.

This medicine is found in our earliest pharmacopœias under the name of tinctura martis in spiritu salis marini, and was a great favourite amongst the physicians of former days, and was ranked in the dispensatories "as preferable to the calces and croci of iron, being both more certain and more speedy in its effects." As a tonic,

where the digestive organs have become impaired, either from disordered function of the stomach, in assimilation, or from diminished power of excretion from the intestinal canal, it is much to be commended. Where much debility, arising from loss of appetite dependent upon such causes occurs, a few drops of the liquid taken in a glass of soda water for a few successive days invigorates the system, raises the spirits, and improves the general health in a very striking manner. In females the effect of this preparation of iron is much more remarkable than in man. It seems to be particularly adapted to them in many of those states in which a deficiency of menstrual excretion, or irregularity of appearance occurs. Whilst it promotes this function, it is also serviceable in restraining hæmorrhages from the womb, although it has been supposed to be contra-indicated, from it possessing the power of acting as an emmenagogue; whenever, in such cases, it produces flushed cheek, dry lips, white tongue, and tendency to cephalgia, it must for a time be discontinued, and again had recourse to after aperients, as castor-oil and the neutral salts. Twelve or fifteen drops taken daily, three times a day, largely diffused in water, will be quite sufficient; soda water, notwithstanding a decomposition occurs, is by far the most agreeable mode of administering it, if given not more than once in the day. It is not generally to be prescribed in combination with the alkalies, nor with their carbonates, nor with the carbonate of lime, or of magnesia, nor should it be added to any infusion of the vegetable tonics which possess an astringent principle, as it renders it of a black colour. It is decomposed by a solution of gum arabic. Mr. Cline first recommended it, in the course of his lectures, in retention of urine arising from spasm at the neck of the bladder, and since that time it has been very generally administered in the dose of ten minims every ten minutes, until some relief is afforded, and generally this is preceded by a slight nausea. In states of irritation of the bladder during gonorrhœa, when the excretion of water is attended with great pain and suffering, a similar dose, more particularly if a few drops of laudanum, or of tincture of hyoscyamus be premised, will be found most materially to allay the excitement.

It has not been detected in the urine after being thus taken, but, as is the case with the other preparations of iron, it tinges the fæces black. In painful micturition it is best given in warm water, and a warm bath likewise facilitates its operation. In a case related by Dr. Collins, of Swansea, where opium, conium, and the warm bath had failed to give relief, five minims were given every six minutes; after the third or fourth dose a cessation of the suffering occurred, and in less than half an hour water passed without any pain. Two days after this state recurred, and opium and conium again failed, but the tincture succeeded, about one hundred and thirty drops having been given before complete relief was afforded. A communication appears in a volume of The Lancet, from Mr. Hancorn, surgeon, at Sheerness, from which it seems that this remedy was, in his hands, very successful in the cure of cholera. He alternated it with doses of soda; it speedily acted as a diuretic, and the evacuated fluid was black. Six cases were thus cured, and three medical men were witnesses to the success of this treatment. I am not aware whether the suggestion thus given has been elsewhere tried. Nitrate of iron had been recommended by Mr. Kerr to remove slight diarrhœas, which were apt to terminate in cholera; and many patients, whose bowels are easily affected, adopted the precaution of using this prophylactic.

I think, that should the cholera become prevalent again in this country, or should an opportunity present itself elsewhere, the powers of the salts of iron, in controlling the disease, should be thoroughly investigated. The discovery of Professor Ramoglia, of Naples, of the presence of a rare species of worm, imbedded in a quantity of viscid mucus in the intestines, and the fact that an extraordinary epidemic, marked by the presence of worms, was co-existent with the appearance of cholera in that city, are points that excite considerable interest, and may lead to inquiries which may throw some light on the subject. It has been observed, that those who drank spirits during the presence of an epidemic diarrhœa, were more subject to its attacks than those who drank porter and ale. All beer must be more or less chalybeate. Malt contains iron as an ingredient, which, during the process of fermentation, is taken up as a carbonate by the water. Beside which, the nails of the hoops of the vessels, and the use of iron tubs and cans in the cellar, add to the quantity of the metal, as was proved in a revenue prosecution; and its presence may be shown by the red prussiate of potash. That beer is occasionally adulterated by iron, judicial investigations have proved, but the accidental impregnation cannot be avoided, and may occasionally, as where worms exist in the intestinal canal, be rather useful than prejudicial.

I believe in every case in which chalybeates are required, the tincture of the muriate of iron may, with every anticipation of perfect success, be employed. It is also occasionally used externally, and its styptic powers are considerable in various hæmorrhages. The bleeding from leechbites is almost instantaneously checked by it. It has been said to be the basis of Ruspini's astringent, which is the most efficacious of its kind. Warts are often destroy-

ed by it. The sulphate of iron is obtained from eight ounces of iron filings, fourteen ounces of sulphuric acid, and four pints of water; after the sulphuric acid has been mixed with the water, the iron is added, and heat applied, and when the bubbles have ceased to escape the liquor is strained, and set aside, until crystals are formed; the liquor that is poured off is evaporated, that crystals may be obtained, and they are all dried. The dilution of the acid with water is necessary, for concentrated sulphuric acid does not act upon the iron; the oxygen of the water unites with iron, to form an oxide, whilst the hydrogen passes off in the form of gas. The sulphuric acid dissolves the oxide of iron that has been formed, and the resulting compound is sulphate of iron. The crystals are, at first, of a bluish-green colour, but by exposure to the air they become green. They have a styptic taste, are soluble in about two parts of cold water, and three-fourths of their weight of boiling water. Care should be taken that they are not kept in badly-stopped bottles, for a yellow deposit, insoluble in water, is formed on their surface. As they decompose the alkalies, ammonia, potash, soda, and their carbonates, it should not be prescribed with them, nor are they to be united with acetate of lead, nor with nitrate of silver, though it has been ordered in solution with them, in some of the formulæ for injections into the vagina.

RARE CASE OF PERINEAL HERNIA.

To the Editor of THE LANCET.

SIR:—Should you consider the inclosed case, so unique in its nature and treatment, deserving of a place in your valuable and widely-circulated Journal, I shall feel obliged by its insertion. I am, &c. &c.

G. T. HAYDEN, M.R.C.S.I.

Lecturer on Anatomy and Surgery, Original School of Medicine, Peter-street, Dublin.

Dublin, Oct. 23, 1837.

Mrs. B——, ætat. 32, generally healthy, pelvis wide, was safely delivered of her third child, on the 2nd of February, 1837. Labour in all respects natural. A small, soft tumour was perceived at this time, in the vagina, which, from its figure and position, was then supposed to be a polypus.

Six weeks after confinement, in consultation with Messrs. Colles and Wilmot, it was pronounced that the tumour was not a polypus, but a hernia, descending between the rectum and vagina, upon the *right side*, of the size and figure of a small pear, reducible after long-continued pressure; the aperture through which it passed feeling hard, defined, slitlike, and immediately contiguous to the *side* of the pelvis. It was our opinion that the only means of effectually preventing the descent of the hernia, would be by adapting a springed instrument, which would pass on the internal opening, that had permitted the descent of the tumour.

Subsequently to this consultation Mrs. B—— was, from exposure to cold, seized with peritonitis, which, although it yielded to the usual means, yet considerable uneasiness remained in the region of the rectum. Leeches, anodyne enemata, hip-bath, calomel, and antimonials, were employed with but temporary alleviation of her sufferings. After ten days of the most excruciating distress, increased to the greatest intensity when at stool, I discovered, by introducing one index-finger into the vagina, the other into the rectum, that a considerable tumour occupied the interval between the former and the latter, which conveyed a pretty decided feeling of fluctuation; pain greatly aggravated by the pressure of my fingers. The suffering and difficulty experienced during defecation were now readily accounted for. I subsequently introduced the largest sized bougie into the uterus, with great ease, as the os uteri was so patalous that it would admit the point of the finger. This tumour was quite unconnected with the hernia before-mentioned.

Mrs. B—— was now again seen by Mr. Colles, who agreed with me in opinion, as to the existence of an abscess between the rectum and vagina. This poor lady besought us to perform any operation that would relieve her from her present agonising sufferings.

We determined upon introducing the exploratory needle into the tumour from the vagina; unequivocal evidence of matter was afforded by this means. I next introduced a lancet, conveyed upon my index-finger, through the posterior wall of the vagina into the tumour; but, to our no small surprise and disappointment, the saucer was removed from the os externum without being soiled with discharge. On visiting my patient next morning, I was informed that her sufferings during the preceding night were just as severe as ever. I now introduced a long and large-sized probe into the opening that had been made by the lancet; but still pus did not flow, although this instrument, on removal, was smeared with matter. Conceiving that the contents of the abscess were obstructed by the interposition of the parts in a valvular-like way, I determined upon using a trocar and canula in the ring. When I called upon Mrs. B——, I learned that in about an hour after I had introduced the probe, on rising to pass water, nearly a pint of well-formed pus was discharged, at once, through the vagina, to the no small relief of my patient. Matter continued to flow, for upwards of ten days, from the abscess. Hectic symptoms now

set in, which were removed by country air and tonics.

In less than three months this lady was restored to her usual good health. Some fullness and hardness remained on the site of the abscess. Menstruation as regular as ever. I shall now return to the original affection. The hernia had increased in size.

I found considerable difficulty in conveying an idea of the instrument required for its support to our instrument-makers. At length I applied to my friend Mr. L'Estrange, whose ingenuity and mechanical genius are too well known to the profession and the public to need any tribute of praise at my hands. This gentleman most obligingly visited my patient, and undertook the task. Under his superintendance an instrument, on the principle of a truss, has been constructed, which completely keeps the hernia *reduced*, without producing any marked uneasiness by its pressure. This ingenious instrument consists of a concave piece of tin, padded, and adapted to the right hip, between the anterior and spinous process of ilium and great trochanter. A girth passes from this around the back, and corresponding part of the left hip, which is fastened with buckles to the other extremity, so as to steady the padded tin. Fixed to the latter is a spring, covered with leather, and oiled silk, which passes downwards and inwards to the vulva. The internal extremity is attached, by a screw, to a shank of wood; the latter is adapted to a globular piece of the same substance, like a pessary, which presses directly upon the opening through which the hernia had descended, and in a direction upwards, backwards and outwards.

COLCHICUM IN CASES OF SCARLATINA.

To the Editor of THE LANCET.

SIR:—As scarlatina has reappeared in this city, I have been induced to bring before your readers a notice of a remedy, which, so far as I am aware, has never before been tried in *that* disease; and I do so with the greater confidence in having been partly anticipated in my observations by Dr. Lewins, of Leith. The observations of that gentleman on the use of colchicum, although more particularly applicable to *continued* fever, very much agree with those I had made in scarlet fever, without any knowledge of his experiments.

From 20th July, 1836, to 25th May, 1837, I had an opportunity, in a country district where I then resided, of seeing and prescribing for 126 cases of scarlatina, of which number only one died. That my success was, in a great measure owing to the use of the colchicum, is evident from the fact, that, in the same district, during the same epidemic, and in the same class of patients, but under a different mode of treatment, one out of five or six of all who were affected, died.* It is far from my intention to make an invidious distinction between my own success in the treatment of that disease and that of my brother practitioners, believing, as I do, that the ordinary measures, were, in most cases, early and skilfully applied. But as it is impossible, without a comparative view, to show the advantage of one mode of treatment over another, I have reluctantly availed myself of the above fact. As I intend, at some future period, to present these observations in a more extended form, detailing in full, some of the cases in which the effects of the medicine were most apparent, I shall only trouble you, in the meantime, with the following summary, in order to show the grounds on which my opinion of the efficacy of the colchicum was founded.

As scarlet fever presents itself in different forms, one case differing from another in severity, so it may naturally be presumed that it is not expedient to follow the same mode of treatment in every case; and accordingly colchicum ought not to be administered in all cases indiscriminately. I administered it only to thirty-five patients, being little more than one-fourth of those for which I prescribed, but these, of course, were of the worst description, being all of the pure inflammatory type. In the most of these, bloodletting, both general and local, was had recourse to; in others local bleeding only; and I may here remark, that the effects of the colchicum were always most apparent after detraction of blood; but in all, the following changes were more or less manifested in a short time after its administration. The pulse was diminished in frequency and force; the palpitation of the heart, which in young subjects was often perceptible to the eye, subsided; the inflammation and pain of the throat were alleviated; and the patient often expressed himself "much better." Vomiting was excited in a few cases; but as this seemed always to be followed by an improvement in the state of the tonsils, and generally abated

* It is impossible to give the average of deaths *exactly*, as I was not so intimate with one of the practitioners as to know the number of cases which he had under his charge, but I do not think that it would exceed thirty, as his practice was very limited, and I know that he had, at least, five deaths. The other medical gentleman of the place told me, himself, that, as near as he could *guess*, he had attended fifty patients, and of these I know, from direct information, that he lost at least twelve.

after the rejection of a quantity of bile, it was never found necessary to interrupt the use of the medicine. The bowels were generally more or less purged, and the improvement was always so sudden and marked, after a free discharge of dark bilious stools, that I always considered my patient out of danger the moment they appeared. In some cases, where bloodletting was not premised, these effects were not so easily produced, two days having elapsed in one case before any change was observable.

When called to a case of inflammatory scarlatina, it was invariably my practice, after administering a purgative and bleeding from the arm, or locally by leeches, as circumstances might require, to begin with the *vinum colchici*, and continue it till all the inflammatory symptoms were subdued; a blister round the throat being all that was necessary to complete the cure. Almost the only gargle used was a little warm water, and the occasional inhalation of vapour; and with this, and the treatment above detailed, I have the utmost satisfaction in saying, that I never saw a tonsil, or any part of the mouth ulcerated. The dose of the *vinum colchici* was considerably below that administered by Dr. Lewins, and differed according to the age and strength of the patient. In no case did it exceed twelve or fifteen drops every three or four hours, in a little water, sweetened with syrup, and this only in strong robust farm-servants: for children of four or six years, I began with three or four drops, and decreased the dose, watching its effects, and stopped whenever these were manifested.

Since I had recourse to the use of colchicum in scarlatina, several of my friends, to whom I communicated the fact, have tried it with similar success, and are willing to add their testimony to the truth of my statements. I am, &c.

WM. TAIT.

14, Drummond-street, Edinburgh,
October 1837.

CASES OF TETANUS;

WITH REMARKS,

By P. CAMPBELL, Esq., A.M., *Surgeon, Edinburgh.*

THE comparative rareness of tetanus in this country, prevents the private practitioner from seeing very many cases, even during a long and extensive practice; but he will often be able to acquire more accurate information of the various circumstances and habits of his patient, than the hospital attendant; and his cases may be more diversified, although, perhaps, less numerous than such as may fall, at times, under the care of the army or navy surgeon. On perusing the table appended to the excellent work of Mr. Curling on tetanus, I could not help regretting that the occupations, at least, of the patients were not given; as there may be something in the particular circumstances and mode of life, that may either predispose to, or render more exempt from, this fatal malady. Women are less exposed to the usual exciting causes, and, on that account, are seldomer affected than men; but in the female, the disease seems to be much milder when it does occur, than it is in male patients. Whether it may accord with the observations of others, placed in similar circumstances, I know not, but to me it has appeared, that men employed under ground, where injuries of all descriptions, and often of a very severe nature, frequently happen, are personally exempted from tetanic affections. I do not hazard this opinion at random, but from having had the medical charge of two very extensive collieries eleven years, where machinery, blasting with gunpowder, falling in of the roof, &c., inflicted lacerated and contused wounds, often complicated with fracture, and occasionally requiring amputation; but in no instance did I ever, among these people, see or even hear of a case of tetanus; while I believe that a due proportion of tetanic affections has occurred to me among other classes of patients.

CASE I.—July 22. 1811, 3, P.M., was requested to visit John I., a very tall, stout, muscular man, aged 36 years, of dark complexion, a native of Shetland, and, from his youth, a sailor; of sober, industrious habits. He had been employed in every quarter of the globe, often the one half of the year in Iceland, and the other in the Torrid Zone. For some weeks the vessel to which he belonged, lay in the Leith harbour to undergo repairs, and, during that time, he was a good deal exposed on deck, mending the sails, &c., by day, in very warm weather; and, in the chill of the evenings, was in the habit of coming home to his family in an open boat, a distance of eight miles. Last night he complained of being cold and very uncomfortable when he went to bed, and, after passing a restless night, was unable to get up in the morning. On entering his apartment, I found him in a violent paroxysm, resting completely on his heels and occiput, with frequent spasmodic twitching of his whole body. The abdominal muscles were tense as a board, and the trunk of his body formed an arch with the extremities. The features were distorted, the pupils contracted, the jaws firmly locked, and his whole body covered with perspiration, which exhaled a very peculiar fœtid odour. The pulse was firm and full, about an hundred, I should suppose, when I first took hold of his wrist; but it gradually fell to 84 on the paroxysm abating. He had been in that state from midday, the paroxysms returning

at short intervals, and always on the least exertion. For three hours he had neither spoken nor attempted to swallow any thing; but he appeared to have been sensible, for, on being questioned about his feelings, he pressed both his hands on his breast over the lower extremity of the sternum.

Under these circumstances there was little time for deliberation, nor had I any friend near to have assisted me with his opinion; my resolution was, therefore, soon determined. Some of the bystanders were sent with pitchers to neighbouring salt-pans, to bring the hot brine, to be mixed up with fresh cold water to the proper temperature for a bath; while others went to procure a proper vessel for that purpose. In the mean time I threw up a copious enema of solution of sulphate of soda, which brought away some hardened fæces with flatus; but my object was to have him put into the bath as soon as it could be got ready. This we accomplished with more ease than I expected, considering the rigid state of his whole body, and particularly the lower extremities. As soon as he was properly supported in the bath, one of his companions was appointed to rub the spine with a piece of woollen cloth, and I, at the same time, let blood from his right arm in a full stream. In a short time after the blood began to flow, he looked around him with much apparent satisfaction, and said to his friends, that he supposed that they had now hove him overboard. He soon after became sick, and vomited some bilious matter, and when about forty ounces of blood were taken, he was wiped dry and put to bed in warm blankets, with hot bricks applied to his feet, having been in the warm bath about half an hour.

As soon as he recovered a little from the fatigue, he had a draught of *tincture of opium*, ʒjss.; *sulph. ether*, ʒjs., in a glass of port wine. This he was able to swallow without much difficulty, and said, in a low tone of voice, that he felt himself as if in another world, but lay still on his back, with suppressed respiration, afraid to speak or to stir lest his agony should return.

Having been with him, about an hour and a half, he was left in the charge of a careful person, with strict injunctions that no one should disturb him. Two hours after, I found him in the same posture, but continuing better. The spasms have returned, but at longer intervals, and soon abate again; he now perspires freely, and in a suppressed whisper informs me that the darting pain in his breast is a great deal better. *Opium*, ℈j.; *submur. of mercury*, ℈ij.; *white sugar*, ʒi.; divide into twelve papers; one to be given every hour while he continues awake, and the spasms return.

Half-past eleven, P.M. Has taken two of the powders; pulse 82, soft and full; lies composedly on his back, and seems inclined to sleep. The blood is very buff. Continue medicines.

23. Eight, A.M. He lies still on his back, but has slept a good deal during the night, often very composed and quiet; but he sometimes awakes with a start, and moans a little, without being completely awakened, so as to be able to speak. Had five more of the powders, with gruel mixed with the wine, which he takes in spoonfuls, and with considerable ease. The darting pain in his breast continues better, but has had *cramps*, and is afraid to move or to speak, as any exertion makes them worse. Voids his urine freely. No stool; pulse 78, full and soft. *Castor oil*, ʒjs., and enema after it.

Seven, P.M. Has passed three fœtid and copious motions; puts out his tongue now in a tremulous manner, and it appears pretty natural; pulse 76, good; complains of being all sore, as if he had been severely beaten, particularly if he takes a full breath, or moves; but the starting and cramps are less troublesome, and he takes his drinks with more ease. Continue the powders every three or four hours.

24. Nine, A.M. Has slept more than two hours at a time, and has taken four of the powders, with wine and gruel. Thinks he can eat bread for breakfast, with a cup of coffee, which is allowed him. Continue the powders thrice a day. From this period he continued to do well in every respect.

On the 27th his mouth was affected with the mercury, when the powders were discontinued, and his bowels kept gently open with proper laxatives, while he was allowed light nourishing food; and in ten days he resumed his duty, and continued in good health for many years. While he was employed mending the sails, he was sensible of having pricked his fingers several times with the needle, but thought nothing of it; this, however, with the action of the cold evening air, seems sufficient to account for his attack. My object being merely to record facts, rather than to enter into speculations, I forbear, at least for the present, to make any remark on the treatment adopted in his case.

Case 2.—Aug. 12, 1820. J. C., aged 17 years, a stout made, healthy youth, with a fair, ruddy complexion,—an apprentice to a baker,—while turning a horse and cart in a narrow lane, got his right hand severely bruised between the end of the cart shaft, and a rough adjoining wall. The integuments on both sides of the hand were much lacerated, and the metacarpal bones of the first and middle fingers were fractured. He continued to do well till the 18th, when, on calling in the forenoon of that day to dress him, I first observed the dressings tinged, and supposing he had been taking too much liberty, began to question him how it had happened; I instantly observed that he spake in a stammering, unusual manner, with fre-

quent twitching of the muscles of his face, and in particular the lower jaw. Says he feels a stiffness in the back of his neck, and fulness about the root of his tongue, but thinks he got cold during the night, as he now feels chill and uncomfortable. Took breakfast an hour ago, with little appetite, and had difficulty in swallowing what he took. Pulse 82, hard, and full. He protrudes his tongue pretty well, but with constant twitchings; and it appears rather loaded in the middle, with red edges. Discharge from the wounded hand ichorous and bloody, with pale, flabby, unhealthy granulations, and his skin under his clothes feels hot and parched.

Twenty ounces of blood were drawn from the affected arm; this induced a tendency to syncope, and brought out a copious perspiration. The whole hand was then enveloped in a large poultice of bread and water, with a good proportion of fresh hemlock leaves, and directions given to renew the same every three hours.

℞ *Compound jalap powder*, 3i; *Ginger powder and calomel*, of each vi. grains. To be taken at once.

Eight, P.M. The powder has operated very well; motions dark, and very fœtid. He is much relieved, and the chilliness has abated, but still feels the fulness about the root of his tongue. Continue the poultices, and let him take *comp. ipecacuan. powder*, Di.; *calomel*, gr. vi.; in jelly.

13. Ten, A.M. Has passed a good night, and taken breakfast with his usual appetite, and with very little difficulty in swallowing. No stool; to take *sulph. magnesia*, 3j. at once.

Nine, P.M. Has passed several thin, fœtid motions, and thinks himself quite well. Continue the poultice and powder as last night.

14. Seems free from every tetanic affection, and the sore is clean, and of a healthy appearance. The poultices were discontinued, and the hand dressed simply, and in such a way as best to preserve the free use of all the fingers, which object was, in due time, accomplished, without any more bad symptoms.

Case 3.—Oct. 4, 1826. A. T., aged 42 years, a gardener, a stout, healthy man, of florid complexion, called on me, walking with the aid of a staff, appearing to be in great pain, and in a very agitated state. Seven days ago a rusty nail had entered the sole of his right foot, near the heel, which occasioned great pain at the time, and ever since his whole leg and thigh have been stiff, and very painful. Thinks the pain has gone up his back, and fixed in his neck, which is now very stiff and sore, with a fulness about the root of his tongue, which occasions much difficulty in speaking or swallowing anything. Cannot protrude his tongue except in a very partial and tremulous manner; and he has, for the last twenty-four hours, felt great tightness and pain in his breast, darting through to his back. He speaks in a hurried, panting manner, as if he had been walking quick up hill, and his whole body, as he sits on the chair, is constantly affected with tremulous twitches, which he evidently, in vain, endeavours to suppress. He has been applying poultices to the foot, and there is now no pain, on pressure, where the nail entered; nor is there any swelling, or appearance of inflammation, on any part of the affected member.

This poor man had, not long before, been unfortunate in business, and had also lost his wife, leaving him with the sole charge of several young children, in very destitute circumstances. Being aware of this, I used every argument in my power to induce him to go into the Royal Infirmary, but he would on no account consent to the proposal, nor even inform me where he lived, till I assured him that his life was in great danger, and that I could do nothing for him in my own house. On following him to his miserable abode, I found several young children under the care of a sickly-looking female, and all of them in the most deplorable state of poverty I ever witnessed; without any appearance of food or fuel, nor any thing in the shape of furniture, but an old crazy sofa, and some dirty straw. Such was the condition of one who, about two years before, carried on an extensive business as a nursery and seedsman; but his spirit would not bend with his circumstances.

He was blooded to the extent of about twenty ounces, which he thought relieved him a little; his bowels were freely opened, his spine was frequently rubbed with various stimulating embrocations; this last, he said, did him most good. In short, every thing that circumstances would admit of, was done for him; but the disease increased; the spasms, particularly those of the diaphragm, became more violent, and deglutition more impeded; retention of urine, requiring the use of the catheter, occurred. The pulse and respiration varied both in strength and frequency with the spasms; but his mind was not in the least affected (if not rather more acute) till a violent spasm speedily terminated his miserable existence, about eighty-four hours after he called on me. My friend, Dr. Robert Knox, lecturer on anatomy in this city, was kind enough to visit the patient with me several times during his illness, and also to superintend the post-mortem examination twenty-four hours after death. We found congestion of the sinuses, and the vessels of the pia mater filled with red blood, with slight serous effusion between the membranes, and in the ventricles; but the cerebral substance was firm and healthy. There was also serous effusion in the spinal sheath, and about an

inch and half of the dorsal chord soft ened; the origins of the nerves highly congested, and the investing membrane, thickened, of a bright red colour, as if painted with carmine. After a long and careful investigation these were the only morbid lesions we were able to detect.

West Newington, Edinburgh,
Oct. 12, 1837.

ACCOUNT OF A

HUMAN MONSTROSITY,

WHICH POSSESSED

NEITHER A BRAIN NOR A SPINAL MARROW.

By ALEX. Y. NICOLL, M.D., *and* RICH. D. ARNOLD, M.D., *of Savannah.*

ON the 12th February, 1837, we were requested to examine a female negro child, which had the night previous been prematurely born at the eighth month, to give our opinions whether violence had been used or not, which in consequence of the singular appearance it presented, was supposed by those who attended at the delivery. Upon a superficial examination, we pronounced that no violence had been used to destroy the child, but that it was a monster of an interesting character, and requested that it might be given to us for a more minute examination, which was readily granted. We have, with the assistance of Dr. Lewis F. Nicoll, of New York, made as careful an examination of this case as our means and experience would allow us, and believe it is important in determining the question of the evolution of the brain and nervous system; not so much, however, from the deductions which we ourselves have drawn from the dissection, as from its affording additional facts to those which have already been presented to the profession on this subject by older and abler heads than ours.

A front view of the child exhibited to us the eyelids as two round bodies placed upon the top of the head, which, previous to the dissection, we considered as deformities in themselves. In this view, the chin was resting upon the chest, bringing the head so low down that the ears not only touched but were actually turned up by the shoulders. Upon looking at the head laterally, it appeared as if cut off by a plane which intersected it just above the nose; thence passing down to the top of the ears, and there exhibiting a slight prominence, as is shown in the fig., accompanied by the sponginess of the membrane, hereafter to be mentioned, the plane then passing down at a greater angle to the shoulder.

Looking at the head posteriorly, it appeared as if the whole scalp had been removed, with the exception of a small portion just at the back of the eyes, which passed down on each side close to the ears, and terminated directly upon the shoulders; upon the whole of which hair had been formed. The central portion, instead of the convexity usually observed, presented a very irregular appearance, dark, and bloody, as if violence had been used.—This central portion was covered by a thin membrane, which we believe to be the dura mater. Upon pressing this with the finger it appeared to be in direct contact with the bones beneath, with the exception of a small part in the centre, which felt spongy to the touch, but at the same time of very little thickness.

Proceeding to the dissection, and removing the scalp behind the eyes, we were surprised to find not the least rudiment of the frontal bone, except a portion of the orbitar plates, which was attached to a confused mass of bone, hereafter to be mentioned. Upon dissecting the membrane from the central portion we found it closely adherent to the basis of the cranium, if we may call it so, (with the exception of the spongy central portion that appeared to contain blood), and traced it down to the spinal canal from which it appeared to emanate. Underneath this membrane was a confused mass of bone, very solid, without any marks of the usual divisions of the bones of the cranium. Continuing on, we found no trace of the parietal, the occipital, or the squamous portion of the temporal bone. After an attentive examination we could not discover the least portion of the cerebrum or cerebellum. That portion of the *foramen magnum* which is formed by the sphenoid bone, and which is usually more or less round, was, in this case, angular, the angle being formed by the junction of the basis of two triangular plane faces, the vertrices of which terminated behind the ears, and there formed something like the mastoid process,

which, however, instead of being round, presented a sharp edge looking outwards and backwards. Believing that something might be contained in the confused mass of bone which formed what might be considered the base of the skull, we sawed through it, but found it perfectly solid. In examining the cervical portion of the vertebral column we could not discover the atlas, and found that it was composed of four, instead of seven vertebræ. On opening the spinal column there was no trace of the spinal marrow, but the membranes were present from about the second dorsal vertebræ. From the position and great prominence of the eyes we doubted if there could be any antrum maxillare, which, upon dissection, we found to be the case. The eye had made itself a socket in that portion of the upper maxilla commonly occupied by the antrum. In our dissection we were particularly struck with the quantity of adipose matter we met with, as also the abundance of hair, which, in this particular case, covered the cheeks, the shoulders, the outside of the arms and forearms, the back down to the nates, and the outside of the thighs and legs.

We next dissected down, to ascertain the appearance of the axillary and popliteal nerves, and found them large and well developed. We also dissected the neck, to ascertain the comparative size of the internal and external carotid, but regret that we were unable to determine this in consequence of our wanting the means of injecting them; and the common carotid was so small, and not being injected, we lost all trace of the artery in a mass of caseous matter behind the angle of the lower maxilla. With the exception of the head and neck, every other part of the child, externally, was remarkably well-formed and plump.

From the foregoing description it will be at once perceived that the monstrosity described answers exactly to that known as an anencephalus; as that term has been reserved to designate such as have the brain partially or completely absent," with a corresponding defect of the parts by which it is protected." In this case the external organs of the senses were present.

Our object in bringing this subject before the Society, is not merely that a *lusus naturæ* might be brought to the cognizance of our medical brethren, and not be buried in obscurity; but, in contemplating it, it cannot fail to strike every observer as being pregnant with interest, in a philosophical point of view. In the few observations which follow it is more our object to elicit research than to provoke criticism. In the article in that excellent work "the Cyclopædia of Practical Medicine and Surgery," Dr. Geddings, of Baltimore, has the following observations:—

"In that variety of anencephalous monsters in which the defect is most considerable, there is a total absence of both brain and spinal marrow; the peripheral portion of the nervous system exists, and is well formed, but the nervous centre, or cerebro-spinal axis, is altogether defective. *This is by far the rarest form of this species of abnormal deviation*, and is the *only one* to which the term *anencephalus* can be properly applied. So *seldom, indeed*, does it occur that *only a few cases are to be found on record*."

In this, as in the case reported by Morgagni, and cited in that article, the *cerebrum, cerebellum*, and *medulla spinalis* were absent; and, like that reported by Vanhorne, the deformed bones of the cranium were so thick and closely grouped together that no cavity existed; but the membranes of the *medulla spinalis* were developed.

The membrane lying over the bones of the cranium was undoubtedly dura mater, because, after lifting it up, the periosteum was found adhering to the bones, and, moreover, the membrane was continuous from the cavity of the spine. In relation to the peripheral nerves, there are some facts worthy of attentive consideration. *All* the nerves of the periphery were not present. To obviate misapprehension, we beg leave to state, that in nerves of the periphery we include those which establish a communication between the brain and spinal marrow and the organs of the external senses.

1st. *Of the Nerves to the Orbit of the Eye.*—In the normal state no single organ is so well provided with nerves as this. Anatomists reckon no less than six, viz., the optic; the 4th pair, or pathetic, (the respiratory of Bell); a branch of the 5th, or Trigeminus; the 3rd, or general motor of the eye; the 6th, or external motor; and a branch of the sympathetic which joins it on entering the orbit. It will be recollected that the ball of the eye rested on the upper maxilla, and had formed a fossa for itself in that part usually occupied by the antrum maxillare. A careful and minute examination failed to reveal to us a single nervous filament about the ball of the eye, or in its vicinity. The foramen by which the optic nerve passes through the sclerotic did not exist; and although every other part of the eye was satisfactorily apparent the *retina* (if it had existence) could not be perceived by us. The six muscles of the eye-ball were also deficient.

2nd. *The Nerves to the Nares.*—In the normal state the nares are supplied from two sources, the olfactory and the trigeminus. There was no trace of a single filament of either.

3rd. *Of the Ear.*—There was no cavity in the mass of bone which might be said to represent the petrous portion of the temporal bone. Of course all the auditory apparatus usually contained in it must have been

wanting. The external ear was present, and a small depression represented the *meatus auditorius externus*. As might be inferred, from there being no cavity in which to pursue its usual course through the petrous bone, the facial nerve was entirely wanting. Indeed, the space behind the angle of the inferior maxillary bone was filled with a kind of caseous matter, in which no muscular fibres nor nervous filaments could be found. Not the least interesting thing in this dissection was the anatomy of the nerves going to the tongue and down the front of the neck. As all the nerves of the encephalon which we had looked for, and which should have come through foramina in the cranium, had proved deficient, it was with no little curiosity that we commenced a careful examination of that part. The pneumo-gastric, the hypoglossal, and the glosso-pharyngeal, equally with the portio-dura, trigeminus, patheticus, and motor-oculi, are in the normal state involved in foramina in the cranium, and analogy would have led us to infer their absence. But although, from the shortness and imperfection of the neck, and the small development of the muscles in its front, a little more than ordinary care was required in the dissection, the pneumo-gastric, the hypo-glossal, with its descending ramus, and the glosso-pharyngeal, were distinctly visible. The preparation now before the Society will make it apparent to every one. But they were lost above in the caseous matter which we mentioned as existing behind the angle of the inferior maxilla. The common carotid and the internal jugular were also apparent, though small, and they were insensibly lost in the same matter.

As all the other parts of the body, save the head, were well formed, it remained to be seen what was the condition of the nerves distributed in them. It was not deemed necessary to examine more than one for each extremity. For the arm, the median nerve was cut down to and exposed. It was of a full and natural size. The popliteal nerve was exposed in the same manner and with a similar result.

What the nature of the energy of the nerve is, will probably always remain a matter of speculation. We can appreciate the powers of life only by their effects. But let not uncertainty be hence attributed to our profession above others. Who has ever approximated to the real nature of that wonderful law by which the planets are made to revolve in their respective orbits, and the harmony of worlds preserved? Yet, from a careful examination of its effects, laws have been deduced and made the basis of unerring calculations. So the diligent observer of nature at the bedside, and in the dissecting-room, cannot fail to arrive at a knowledge of the laws of life that will be of inestimable value to him in the investigation of disease, which is a departure from their natural course.

In this case there could be no dispute as to the priority of development between the brain and spinal marrow. Is it not, then, improper to speak of one taking its origin from the other; and is not this case a confirmation of Haller's opinion, that there is an evolution of the parts of the fœtus without the *addition* of any new part?

With the exception of the head all the parts were well nourished. Certainly they did not depend on nervous energy derived from the cerebro-spinal axis for their nutrition. We must, then, look to the arteries as the source of nutrition, and as the cause of the development of such nerves as did exist. It is evident that the arteries which exist in the normal state could not exist in the confused mass of bone constituting the cranium in this instance; hence a deficiency in evolution of the nervous, muscular, and bony matter of that part.

The nerves that were developed tmus have had an energy independent of the brain and spinal marrow.

The result of the researches of Tiedemann on the development of the brain in the fœtus is, that the spinal marrow is the part of the nervous system first formed, and most distinct in its early months. The case before us proves that the deficiency of the spinal marrow did not prevent the formation of most of the peripheral portion of that system, and that such formation is not dependent in any way upon that of the spinal marrow.

Like the majority of monsters on record this was of the female sex. The observations of Meckel have proved that the "genital organs of the two sexes are formed primitively in the same model," and that the embryo is, *in all cases, primarily of the female sex*. The imperfect formation thus occurring more frequently in females, has been supposed by Georget to be owing to a feebler energy of the formative or organic powers in the female than in the male. Why a deficiency should exist in one part in preference to another must remain a matter of speculation.

The history of the mother affords no clue in this case. She is a woman about 30 years of age, well formed, and has been the mother of eight children, all of whom, with the exception of two, have been delivered at the regular time, and her deliveries have generally been easy, and her recovery rapid. There had been nothing peculiar during this pregnancy. In the delivery there was nothing to lead to a suspicion of anything unusual, and it was not until the child was fairly exposed to the light that it was discovered to be a monster. The child showed no sign of life after birth. It had moved, sensibly, when in utero.—*Southern (American) Medical and Surgical Journal.*—Aug. 1837.

THE LANCET.

London, Saturday, November 4, 1837.

The newspapers of this day week contained an account of a coroner's inquest, which was held on the previous day at *St. George's Hospital*, on the body of a man named James Jewrey, whose death was caused under the following circumstances.

From the report of the inquest published in the *Morning Chronicle*, it appears that on the 3rd of this month the man received a a severe injury about the lower part of the trunk, by falling from the roof of a house. He was immediately assisted to the *Westminster Hospital*, and suffered on the road much agony. On arriving at the hospital, his wife, by whom he was conducted, at once informed the house-porter of the urgent nature of the accident, but that personage did not think proper to bestow the slightest attention on the wounded man, for a considerable time after his arrival. At length some medical officer connected with the hospital appeared, and ordered twenty-five leeches to be immediately applied to the injured parts; but, after the lapse of half an hour, or a longer space of time, a nurse entered the apartment, and assured the unfortunate man that there were *no leeches in the hospital*, adding that he could not be received as an in-door patient, he being unprovided with a governor's ticket; the nurse finally recommended his immediate removal home. The man was accordingly taken to his residence, and subsequently was removed to *St. George's Hospital*, where he died on Wednesday, the 25th of October.

At the inquest the house-surgeon of *St. George's* stated that the urethra was ruptured, and that, in consequence of the extravasation of urine, extensive abscesses had formed, and terminated the man's existence, after very great suffering.

The jury, before returning a verdict, animadverted, in the strongest terms, on the gross negligence which had been displayed at the *Westminster Hospital*, and insisted upon a copy of the depositions of the witnesses being sent to the governors of that institution.

This case presents one of those instances of flagrant neglect of duty, and shameless disregard of human life, which are so often exhibited in the metropolitan hospitals, and to which we have on innumerable occasions directed the public attention. Were it not for the unfortunate nature of the case which we have just described, we could almost rejoice at its occurrence, as being calculated to awaken public attention, and direct the minds of humane and right-thinking men, of all classes and professions, towards abuses which have so long disgraced the management of our hospitals, and which will continue to exist so long as the medical men attached to those institutions continue to be appointed privately, and by a *coterie* of friends, to whom alone they are accountable for their misdeeds, and that in a very slight and inefficient manner. In vain have we made appeals to the feelings of hospital surgeons; they seem equally insensible to the calls of humanity, the voice of conscience, and the sense of duties solemnly undertaken; we must, therefore, persevere in the application of the only remedy which we possess, and by giving *publicity* to their proceedings, by exposing their negligence, and laying bare their iniquities, endeavour to limit the operation of the evil, if we cannot effect its total eradication. It gives us unfeigned pleasure to perceive that the press, of every shade of political opinion, has at length felt the necessity of coming to our aid towards the attainment of a reform in which the welfare of the sick poor is vitally concerned; and, we confidently anticipate that the multiplied abuses, against which we have so long struggled alone, will soon disappear before our united exposure of their consequences. In truth the case of the unfortunate man who has just lost his life through the negligence of some individuals attached to the *Westminster Hospital*, is calculated to

awaken feelings at once painful and serious, in the breasts of all humane and reflecting persons. The remonstrance, addressed to the governors of the hospital, which the jury added to their verdict of "accidental death" (it should rather have been "manslaughter through negligence"), indicates fully the nature and extent of their feelings upon the occasion to which we allude. The case called loudly for censure, for it afforded one of those examples of a sacrifice of life, in which the history of hospital practice abounds, but which remain unheeded and unpunished, because hospital surgeons are submitted to no species of control, and contrive, by every means in their power, to withdraw their actions from public scrutiny. To our medical readers we need not present any observations on the case of JAMES JEWREY. The facts speak for themselves. To the mind of the general reader we may briefly recall the circumstance of a man presenting himself to an hospital, for the relief of an accident consisting in the rupture of the urethra, or of the canal through which the urine is discharged from the bladder, and of being dismissed from that hospital without any attempt being made to relieve him. An accident of this kind often admits of prompt and easy relief; an instrument is passed into the bladder for the purpose of supplying, as it were, the place of the injured canal, and of permitting Nature to effect a cure by closing up the wounded part; the action of the urine, a highly irritating fluid, upon the surrounding parts, is thus prevented, and, with a few additional precautions, a complete cure is, in very many instances, effected. This treatment is simple; it does not require the exercise of any superior surgical skill; it would not, in the case under consideration, have been attended with any great trouble, or loss of time to the surgeon, even were we to suppose that the time and talents of the medical attendant in an hospital are not, *de jure*, at the service of all the patients who are brought there under circumstances of pressing danger. But, instead of lending that aid which, though trifling in appearance, might probably have saved a human life, the surgeon only orders the application of a few leeches; but there are no leeches in the hospital; so the unfortunate sufferer is dismissed, and left to his fate. The effects of this conduct are not long in manifesting themselves; the urine, which continued to escape through the ruptured part of the canal, produces, as it always does, violent inflammation of the surrounding parts, and the man subsequently dies in another hospital, after having suffered excruciating torture for three-and-twenty days. This is a plain, unvarnished history of the case, divested of technicality. We offer it, with little comment, for the reflection of the public, and those few individuals amongst our professional brethren who may still deny the necessity of reform in hospitals and other institutions destined for the reception of the poor and indigent sick.

But our history of the negligence and malapraxis which exist in hospitals, does not terminate here. The *University College Hospital* has lately been the scene of a transaction which, if the report we have heard be true, involved not only the reputation of the surgeons attached to that establishment, but the lives of *two* individuals. The facts of this case, as they have reached us, are briefly as follows:—On the 10th of October, a man, named JAMES CHAPLIN, received a bayonet wound in the lower part of the abdomen, supposed to have been inflicted by a soldier in a drunken fray. Soon after the receipt of the accident, the man was conveyed to the *University College Hospital*, into which he was received by the house-surgeon in attendance. The senior surgeon of the hospital was immediately sent for, but did not attend. The junior surgeon was then sent for, but could not, as we understand, be found. The points of most importance, are, that the case was not treated by any one of the surgeons of the hospital; that symptoms of strangulated intestine soon set in, and that the cause of the strangulation was not removed.

On examining the body after death it was found that the bayonet had penetrated the cavity of the abdomen obliquely downwards, the point of the instrument having just reached the wall of the rectum. A small quantity of blood was effused into the abdominal cavity; *a knuckle of intestine was strangulated in the external wound.* The soldier who inflicted the wound was tried for murder on Saturday last, and was found guilty of manslaughter.

This case, also, requires no comment. The immediate cause of the man's death was evidently strangulation of the intestine, and not internal hæmorrhage, or inflammation.

We might readily multiply cases analogous to the two which have been now mentioned; our memory, indeed, could furnish examples of neglect, ignorance, or heedlessness on the part of hospital surgeons, of a still more striking kind. We have selected the preceding merely because they are the most recent.

It is evident, then, that some change must be effected in a system of government which admits of, we might even say, tolerates, abuses attended with such serious consequences. The management of the hospitals and of all other institutions destined for the reception of the poor and indigent sick, must be taken out of the hands of irresponsible individuals, and entrusted to some other power which shall have authority to investigate and *correct* abuses.

A JUST appreciation of past and of present circumstances often enables the mind to pierce the veil of futurity, and thus convert analogical conclusions into prophecies. A month has scarcely elapsed since, in some remarks on the recent history of the cholera, we expressed our apprehension that that fatal malady would soon reappear in the capital of the British Empire; and at the same time we urged the necessity of adopting timely measures either to arrest its progress, should it unhappily break forth, or, at least, to diminish the sufferings of the poorer classes, who are, in general, the first victims of the epidemic. We have already to regret the correctness of our fears in anticipating the approach of the malady, and to deplore that the advice which we then offered has been neglected. There can be little doubt that the malignant cholera has once more appeared in the midst of a portion of the indigent population of the metropolis, totally unprovided to meet its attack. During the last fortnight several suspicious cases had occured in the parish of Limehouse, but these were considered either as unimportant affections, or as not being sufficiently decided examples of Asiatic cholera to deserve serious attention. The disease, however, began to spread; and on Friday last, the 28th of October, the Board of Guardians in that district held a meeting for the purpose of investigating the true nature of the prevailing disease, and of adopting such measures as the urgency of the case seemed to indicate. The proceeding was wise and judicious, and the example should be followed by all the local authorities of districts in which the epidemic may appear. The danger of the evil is pressing; and the remedy, in order to be efficient, requires to be promptly applied. The meeting of the Guardians was attended by all the surgeons who are attached to the Stepney Union, and those gentlemen, after mature consideration of the facts, delivered the following Report:

"We, the medical officers to the Stepney Union, in compliance with the orders of the Chairman, attended at the Limehouse Workhouse, to examine into the cases of supposed cholera which occurred in Ropemakers'-fields, and beg leave to report, after a most careful investigation, that we are of opinion that the cases alluded to are malignant cholera.

"It will be satisfactory to the Chairman and Board that no fresh cases have occurred since yesterday.

"ROBERT HEELIS
"CHARLES JOHNSTON
"CHARLES SALLNOW
"—— BATSON
"THOMAS DRAKE
"JOHN BIRTWHISTLE
"JOHN STORY."

"October 26th, 1837."

The opinion thus jointly expressed by a number of able and respectable medical practitioners, must be received as conclusive, that the disease has reappeared in this metropolis. We have made it our business to visit the Limehouse district; we have seen four of the surgeons by whom the above report has been signed, and these gentlemen, all of whom have had extensive experience of Asiatic cholera, have assured us that not the slightest doubt can be entertained of the identity of the disease at Limehouse with the epidemic of 1832. Many persons, however, seem inclined to regard the cases at Limehouse as examples of sporadic cholera, and greatly declaim against the spreading of what they term "unnecessary alarm" on the subject throughout the country. For ourselves, we speak not as idle alarmists, but from a perfect acquaintance with the history of the Asiatic cholera, we were induced, not long since, to announce the probable return of that disease to the shores of England; and now, with the same conviction, we feel ourselves bound to state that the epidemic, whose progress we had followed from Marseilles to Naples, from Naples to Rome, and from Rome to Berlin, has,—regulated by some extraordinary and inexplicable circumstances,—suddenly leaped across a large adjoining tract of Europe, and settled in the capital of the British dominions.

The local authorities at Limehouse have, it appears, applied to the Secretary of State for the Home Department, for advice and assistance in the present emergency, and it can hardly be doubted that every measure which is rendered necessary by the urgency of the case, whether precautionary or remedial, will be adopted and enforced on the occasion. The characteristic improvidence of the English Government in all matters which concern the public health, it is to be hoped will forthwith cease, and a cautious superintendance be exercised as regards the possible march and progress of the disease. A fatal epidemic is at our gates, ready to exercise its devastating power. Apathy on the part of the ruling powers may cost us the lives of many thousands of our fellow-countrymen. Is it unworthy of administrative wisdom to design measures against an enemy not less destructive or dangerous to us than would be an invading army of foreign foes suffered to land upon our shores, without the slightest preparation having been made to receive it, or the most common precaution taken to obstruct its progress?

The Edinburgh Dissector; or, System of Practical Anatomy, for the Use of Students in the Dissecting-room. By A Fellow of the College of Surgeons in Edinburgh. Baillière, London, 1837.

This will form a useful manual for students to consult in the dissecting-room. It is evidently written by a gentleman well acquainted with the details of practical anatomy, and with the difficulties which the student most commonly has to encounter in the study of the parts and organs composing the human body. The most useful part is that which treats of the manner of dissecting the muscles, the arteries, the different regions more immediately connected with surgery, the organs of sense, &c. Upon all these points the student will find copious information, of a practical nature, which is clear enough to enable him to prosecute his anatomical pursuits without the constant superintendance of a teacher. In other respects, however, the "Edinburgh Dissector" does not seem superior to the Dublin one. The glossary, at the end of the volume, is a very useful addition.

Hints to Mothers, for the Management of Health during the Period of Pregnancy, and in the Lying-in Room. By Thomas Bull, *M.D.* London: Longman and Co, 1837.

In the short preface prefixed to this little work, Dr. Bull judiciously remarks, that feelings of delicacy often prevent many young married females from making, to their medical attendant, a full disclosure of the circumstances connected with their state, and which render medical assistance necessary.

The object of the work is to meet this difficulty, by furnishing a species of information for which married women are often unwilling to *ask*, although they readily search for it in books.

Dr. Bull has divided the volume now before us, into six chapters; the first exposes several popular errors, which women are apt to entertain, upon the subject of pregnancy; the second treats of what we might call "the popular" signs of pregnancy; in the third chapter the diseases of pregnancy are noticed, and some useful hints are thrown out for their prevention and relief; the fourth chapter treats of miscarriage; and the fifth and sixth contain hints for the lying-in room and for suckling.

The matter of Dr. Bull's treatise is arranged completely in a popular form,—in one that is best calculated to be understood by the fair readers to whom it is addressed; we shall therefore content ourselves with observing, that on the several points enumerated above, it contains a variety of useful information, so clearly conveyed as to render it a very valuable companion for all married women who expect to become mothers.

FEES FROM LIFE ASSURANCE OFFICES FOR MEDICAL OPINIONS.

To the Editor of THE LANCET.

SIR:—I have just read in the last number of THE LANCET a letter signed "J. R." in which he attempts to show that insurance companies ought not to pay the medical referee, founding his argument on what he calls a difference between *testimony* and *opinion*; and stating that the company refers to the usual medical attendant for *past facts*, and that they submit these to their own medical man for his *opinion*. This is not true, as the following question, put in various forms by different offices, will show,—"Are you acquainted with any circumstances which in your *opinion* renders an insurance on his life more than usually hazardous?" If this is not asking an *opinion*, and a pretty comprehensive one, independently of other searching questions, I know not what can be so considered, and this, too, to be given to them in confidence, and kept strictly concealed from the proposer. It is quite time this question should be settled, and medical men should, one and all, refuse any communication with insurances offices, without they are adequately paid for their, to them extremely useful, information. They have long enough realized enormous profits by the brains of medical men. If the information they obtain from medical men is necessary or useful to the company, they ought in justice and honesty to remunerate them for it handsomely. If unnecessary or useless, why ask it? causing sometimes a great loss of time and money, as in the case of disputed claims, &c. What would a lawyer think if a person, of whom his client wished to borrow money, were to come and ask him his confidential opinion of the risk he would run in lending it to him, and requiring a minute account of his circumstances?—I am, Sir, your obedient servant,

AMICUS JUSTITIÆ.

October 23, 1837.

STOW UNION.

LETTER FROM MR. BEDINGFIELD.

To the Editor of THE LANCET.

SIR:—Before any one undertakes to impugn the accuracy of others, he ought to be particularly careful to proceed upon correct data himself, especially when he professes to be actuated by "a spirit of fairness." Nothing can be more correct, as you have observed, than the statement published by the poor law committee of the Medical Provincial Association, relative to the Union of Stow, viz., that previous to the introduction of the New Poor Law Bill, there were three legally-appointed surgeons to the *fourteen* parishes constituting the Hundred of Stow, and that there are now only the same number of legally-appointed medical men to attend upon the whole Union, consisting, at the present moment, of, I believe, *thirty-three* parishes, the longest diameter of which probably exceeds seventeen miles.

It may not be uninteresting to some of your readers to see a concise exposition of the degrading system of sub-appointments, as well as of the different practices pursued in the different Unions. When the assistant poor law underlings, Messrs. Mott and Kay, commenced their bungling operations in Suffolk, I took the liberty to point out in an address to Lord Melbourne, the evils which must result to the poor, and to the medical profession, from a strict adoption of their measures. My objections were unanswered, any further than by permission being given to the district surgeons to engage neighbouring practitioners to assist them in the performance of duties which, from the nature and extent of those duties, it was obvious they could not themselves perform. I believe these sub-appointments to be illegal; but it seemed expedient to the Poor Law Commissioners to act illegally, and they winked at the sub-appointments rather than allow of the direct engagement of a sufficient number of surgeons. The manner in which these sub-appointments

have been made has varied in different Unions—in some the surgeon has been left uncontrolled in his choice of assistants; in others they have been made subject to the approval of the Boards of Guardians. The Woodbridge Union was, and still may be, an instance of the former; and the Stow Union is an instance of the latter. This want of uniformity has been productive of much bickering and heart-burning. In the Woodbridge Union one of the surgeons deputed another to attend upon a parish which was placed at an inconvenient distance for himself; but the parishioners not approving of the person so appointed, applied to the Board of Guardians upon the subject. The reply of the Board was, that "they could not interfere in such appointment." In the Stow Union the opposite practice was pursued; the surgeons were told that their nominations must be subject to the approval of the Board of Guardians. The beautiful operation of their plan very soon manifested itself. One of the assistants nominated by a district surgeon, and *approved* of by the Board of Guardians (although he was an *entire* stranger to them), was reported to have very grossly neglected his duties; and it was said, how truly I know not, that some paupers had died without ever having been visited. For this neglect the Guardians censured the district surgeon, who very naturally and properly retorted upon them, that as they had approved of his nominee, he considered all responsibility removed from himself in the parishes so transferred.

Allow me now to inquire how far the authority of the Poor Law Commissioners and Guardians extends. Have they or have they not any legal right to prevent any surgeon appointed by them, from dividing his parishes with another practitioner? And having so divided them, what right have they, without the slightest ground, or charge, of neglect of duty, to remove him from those parishes? I have the honour to remain, Sir, yours very respectfully,

J. BEDINGFIELD.

Medical School, Stowmarket,
Oct. 28, 1837.

MESMERISM AT UNIVERSITY COLLEGE HOSPITAL.

To the Editor of THE LANCET.

SIR:—Mr. Wood is highly offended that I do not take a more favourable view of the *science* of mesmerism. This is somewhat remarkable; for, upon the whole, the conclusions at which Mr. Wood arrives do not appear to differ materially from my own. I plead guilty to having forgotten the exact statement in Dr. Elliotson's lecture, not having THE LANCET by me to refer to while writing; however, impartial persons will not think much of this error. I said that it was unnecessary to enter into the details of that able lecture; as an old pupil of the learned professor, I did not wish to "leap my light courser o'er the bounds of taste," by placing my judgment against that of my teacher. I spoke only of such experiments as had been performed during the absence of Dr. Elliotson; and, curiously enough, though Mr. Wood was present, I believe, during these very experiments, he does not controvert one of the *facts* which I stated respecting them. On those facts my opinion was founded, for before these deviations from the assertions of M. Dupotet occurred, I was inclined to believe somewhat in mesmerism. To the facts in question I again appeal. They prove at least this, that in one instance (that of Rebecca) the sleep, on one occasion, was neither "mesmeric" nor produced by mesmerism,—unless, homœopathically, a small dose produced an effect which a larger one, of the same kind, removed. Surely Mr. Wood forgets that Rebecca applied at the hospital from having seen accounts of M. Dupotet's experiments in the papers; she was, therefore, not entirely ignorant of what was to be done, nor of the effects that were expected. But I have no wish to quibble in the matter. What have been the results of M. Dupotet's experiments at the hospital? *That* "is the question." Leaving the case of the girl with ecstatic delirium, as recorded by Dr. Elliotson, for each reader to draw his own conclusion from it (remembering that the mesmerism produced the state which it now temporarily relieves, and that the patient is epileptic) let me ask, what do all the other experiments prove?—"That mesmerism has the power of producing a peculiar state, in peculiar habits, which state resembles the coma following epilepsy, or the insensibility attendant on hysteria,"—or, in other words, the "profound *mesmetic* sleep" of Mr. Wood. I speak of all the cases, male and female, which have been operated on, leaving that of the girl with ecstatic delirium, to the verdict I have above proposed. The "gaspings, or catchings of the breath," would, of course, accompany a state of drowsiness. Mr. Wood will not forget that many male patients were operated upon without the slightest effect being produced, even during half-an-hour's manipulations, in some instances. Four epileptic males were operated on in one day, and only one of these experienced any effect therefrom, and that one felt *drowsy* after the motions had been made before his eyes for upwards of twenty-five minutes. No wonder! Boerhaave sent a patient to sleep by dropping water on a brass pan, even when narcotics have failed. Drowsiness is producible by the monotonous sound of a water-mill, the ticking of a clock, or the motion of its pendulum; and I myself felt drowsy while

watching the mesmeric motions of M. Dupotet on his patients. So did other spectators.

I have said that some "peculiar" habit of body is required, without which mesmerism produces no effect. It is evidently not an epileptic habit, because in several epileptic patients the experiments failed. Perhaps it consists in a peculiar sensitiveness to external impressions,—what Sir B. Brodie would call an "hysterical" state.

In making these observations, I have no wish to be classed among those who laugh at mesmerism, or who wish to stop it by ridicule. I only appeal to facts, and though I may differ from Dr. Elliotson respecting the extent of its powers, I admire the courage which he has evinced in judging of the subject for himself, and the philosophical spirit in which the experiments were carried on in the hospital during the time that *he* superintended them. I am, Sir, your obedient servant,

Oct. 30, 1837. THE EYE-WITNESS.

WESTMINSTER MEDICAL SOCIETY.

Saturday, October 28, 1837.

Dr. WILLIAMS, President.

HÆMORRHAGE FROM THE LUNGS.

MR. BRUNSKILL laid before the Society a portion of the superior lobe of the left lung of a child who had died from hæmoptysis, and concerning whom he stated the following particulars:—The little patient was about twelve months of age, of a delicate, scrofulous appearance, but giving no kind of evidence of any particular disease, and not suffering from cough or other symptom of phthisis. It was suddenly seized, while in bed, with coughing, and brought up large quantities of blood—apparently about a pint. When the medical attendant arrived, he found the child pale, and gasping, and blood bubbling from its mouth. Another fit of coughing soon came on, fresh blood was brought up, and the child perished. The portion of lung exhibited, presented an ulcerated cavity, the result of tubercular deposit; a large vessel communicating with the bronchus had become involved in the disorganization. On cutting into the lung, many tubercles were observable.

Dr. ADDISON had seen a parallel case in an adult, a stout man, who, after making violent exertion, was suddenly seized with hæmoptysis; this returned on several occasions; blood, in large quantities, was brought up, and he sank. On examination, an isolated cavity, evidently an old one, was detected, which had involved a large vessel. The appearances were somewhat similar to those observable in the case of Mr. Brunskill, but the cavity was full of blood.

Mr. MALYN had examined the body of an individual who, apparently in good health, was suddenly seized with vomiting of blood in large quantities, and died instantly. On examination, the stomach was found to contain some grumous blood, and there was evidence of blood having passed through the intestines; but no spot from whence the hæmorrhage proceeded could be detected. On examining the œsophagus, an orifice was found communicating with the root of the lung, to which the œsophagus had become adherent. A vessel opened into this cavity, from whence the blood was poured into the stomach, and vomited up.

Dr. J. JOHNSON referred to the case of the late Sir Mark Wood, who died about two months since, aged 48. This gentleman, for twelve or eighteen months before death, expectorated a large quantity of purulent matter. He was sometimes better, sometimes worse, but he always expectorated, more or less. Pectoriloquy and cavernous respiration were heard in the upper portion of the lung. He was one day suddenly seized with hæmoptysis, which stopped and recurred again at intervals during four days, and part of the fifth. One night as much blood as would nearly fill a hand-basin was brought up. Bleeding, cupping, and styptics were employed. The only styptic that appeared of service was Ruspini's, and this succeeded in arresting the hæmorrhage for the space of twelve hours; so that some hope was entertained. One night, however, the patient suddenly sprang out of bed, fell flat upon the floor, and instantly died, no blood coming up at the moment. A large cavity was found at the superior part of the left lung, other smaller ones communicating with it; the vessel from whence the hæmorrhage proceeded was situated in one of the smaller cavities. The bronchi were filled with blood. On one side of the larger cavity Nature had provided against the further extension of ulceration, by the formation of a cartilaginous kind of substance.

POISONOUS CANDLES.—ABSENCE OF MEDICAL POLICE IN THIS KINGDOM.

Dr. SCOTT wished to have the opinion of the Society, respecting a subject in which the popular health was much concerned. It might be remembered by some of the members that a few months since, Mr. Everitt introduced some experiments before the *Medico-Botanical Society*, in which he proved the existence of arsenic in some candles which had been lately brought out for the purpose of superseding the more expensive wax-lights. Mr. Everitt, in those experiments, only detected four grains of the deleterious substance in a moderate-sized candle; but it having been found by the various manufacturers that the larger the quantity of arsenic, the more alluring was the appearance of the candle, and the more

brilliant the light, the poison had been gradually increased; and he (Dr. Scott) had now authority from two of the most extensive factors of these lights, to state, that one pound of arsenic to twenty-eight pounds of stearine were the proportions employed in their manufactory. Now, as these candles were not only much in use in private families, but had lately been introduced into some of the churches, and were likely to find their way into the theatres, he thought it would come within the province of the objects of the Society, to state its opinion respecting the safety of such a quantity of a poisonous mineral being burnt, and its vapour inhaled. The manufacturers to whom he had alluded, were anxious that the subject should be investigated; they had been compelled in self-defence to commit a fraud upon the public, by selling these fictitious articles, in consequence of the great competition which had arisen from their manufacture by at least a dozen factors in this city, each endeavouring to surpass his rivals by putting large quantities of arsenic into his candles.

A long conversation followed respecting the state in which the arsenic would be, when burnt in the candle. Dr. Addison seemed inclined to think that the wick, during combustion, would act in the same way as black flux, and, reducing the metal to its simple state, would render it innoxious; while several other members considered that the product would be arsenious acid, and consequently of a very poisonous nature.

Mr. QUAIN and Mr. COSTELLO spoke of the entire absence of a medical police to watch over the public health of the inhabitants of this country, while our continental neighbours had a most efficient body for this purpose. The latter speaker alluded to the appeal made by Dr. O'Shaughnessy on the subject, and the indifference with which it was received. He thought Government always seemed desirous of having as little to do with the medical profession as possible. Here the subject dropped.

In the course of the evening it was announced that Mr. Hale Thomson was elected President, and Dr. Chowne Vice-President, for the ensuing session.

A vote of thanks to Mr. Quain on his retirement from the chair, was proposed and carried.

MEDICAL SOCIETY OF LONDON.

Monday, Oct. 30, 1837.

MR. BRYANT, President.

SPONTANEOUS GANGRENE.—PURPURA HÆMORRHAGICA.

Mr. WHITMORE related the following case, to show the sudden and unsuspected occurrence of a fatal disease in an aged person. About a month since he was attending a child, and was requested to see an old lady in the same house, who was not laid up, but felt a little poorly. She was a healthy-looking woman, about seventy years of age, and only complained of an "emptiness about the stomach." She suffered from no pain. Her pulse was under 80, and natural in every respect for a person of her age. A little tonic medicine was ordered. This was on a Thursday. On the Saturday morning following he was again requested to see the old lady, as she had been getting gradually worse, and one of her legs had mortified. On visiting her at 12 o'clock, he found the leg, from the instep to the knee, in a state of gangrene; the cuticle was separating, and there were large phlyctenæ, some broken, on various parts of it. He was then informed that up to five o'clock on the previous evening, having complained of a little pain in the leg during the day, she had walked about the room at her own request. The leg was bathed with warm vinegar and water. There was not the slightest appearance of redness; but, at 12 o'clock that night, a dark spot began to appear in the middle of the calf; this rapidly extended, and, in the course of two or three hours, had involved the leg to the extent above mentioned. She was now in a state of approaching dissolution, and died at 12 o'clock on Saturday,—about thirty-two hours after having walked about apparently well. There had been no wound in the leg, nor any apparent cause for the gangrene. The limb had not been the least anasarcous before, neither was the patient intemperate. The pulse, on his first visit, did not indicate any obstruction to the circulation. He had no idea of the immediate cause of the malady. It was curious that the disease should have commenced in the calf of the leg, and that the foot should have remained entirely free. There was no autopsy.

Mr. DENDY, after some cautions on the prognosis of disease in old persons and children, related a case in which an old lady of seventy-five, who had been suffering from a very slight attack of typhus mitior, perished from purpura hæmorrhagica, at the end of eleven days from the occurrence of the typhus.

Mr. KINGDON cautioned the members against interfering with the bunions of old people, from removing which "corn-cutters" sometimes accomplished the death of the person.

Mr. PROCTER said that old people sometimes suddenly died from the slightest causes. Common purgatives had proved fatal in such persons.

Mr. HEADLAND, in relation to cases of sudden death, said, that when the pulse was below 80, generally speaking, the patient was not within, perhaps, thirty-six hours of dissolution.

Dr. CLUTTERBUCK mentioned the following case, to show the difficulties sometimes of arriving at pathological conclusions, and the little use of medical aid in some instances. He was consulted, some months since, by a female, thirty-five years of age, of full habit, and indolent mode of life, who suffered from a chronic affection of the liver, and complained of uneasiness at the epigastrium, and disorder of the stomach. As the symptoms were active she was bled twice, to the extent of six ounces, with great benefit, and she lost all symptoms of disease. She came again to him about a fortnight since, complaining of pain in the epigastrium, deficient appetite, and a degree of sleeplessness. He recommended mild aperients, to be followed by the infusion of gentian. He saw her while under the influence of this medicine, but the symptoms remained the same. As bleeding had relieved her before, and as the system did not want power, he allowed four ounces to be taken, the blood being highly buffed and cupped; but the symptoms changed not. The pulse was not at all weak; the tongue but very slightly coated; the skin not preternaturally hot; the surface not febrile; the uneasiness at the epigastrium, and the restlessness, continued. His attention was now called to some blotches of purpura on the legs, arms, and trunk. The pulse was strong, rather than otherwise; and if there had been any pain present, he would have recommended further abstraction of blood. He was struck with the opposite character of the symptoms; he expected to find much more debility, and a weaker pulse. He knew not how to act. He did not, therefore, proceed actively, but employed lemon-juice to as great an extent as could be borne. The ecchymoses, however, spread, and inclined to hæmorrhage; the saliva, urine, and fæces became bloody, and she menstruated dark-coloured blood. She breathed laboriously, from want of power to expand the chest. She grew weaker, and her pulse began to fail; she complained of oppression, not pain, about the head, and confused vision. Tonics and stimulants were now employed, but had no effect on the disease, and the patient sank in two or three days. The post-mortem examination threw no light on the case; and, after dissection, he was as much in the dark as before, regarding the pathology of the affection. Here was a case in which the heart and large vessels were acting with proper and natural energy, while the capillaries allowed the escape of blood. He understood neither the pathology nor the treatment of such a case. Oil of turpentine, in small doses, had been recommended in one of the journals, in cases of purpura, but in this instance there was no time to use that remedy.

CHOREA, WITH FATAL TERMINATION.

To the Editor of THE LANCET.

SIR:—In relation to a case of chorea published in THE LANCET of August 19, I wish to mention one which arose from uncommon causes, where the patient came under my care some weeks before the symptoms of chorea showed themselves; and I trust that the physician under whose care the patient afterwards was placed will mention any other matter appertaining to the subject.

A girl, about thirteen years of age, came to the Nottingham Hospital with a fungous excrescence protruding from beneath the lower portion of the thumb-nail (of which hand I know not), and which had progressed rather rapidly, attended with uneasiness. After touching the fungus with solution of the nitrate of silver four or five times, and twice with potassa fusa, it healed. To my astonishment, within a month afterwards she was admitted into the house suffering under the most unequivocal symptoms of chorea, which were assuming daily a worse aspect. During the last three or four days before she died, she passed her fæces and urine involuntarily, had delirium, sleepless nights, and bed-sores, probably from friction, though she was kept as clean as possible. The treatment consisted in the administration of good doses of carbonate of iron and quinine. Towards the last, calomel, &c., and blisters, and other derivatives, were employed. I fancy leeches were applied behind the ears, when the disease was getting obstinate. The post-mortem dissection exposed to view serous effusion, and a somewhat softened state of the brain. I am, Sir, your obedient servant,

R. DAY.

Brompton, Sept., 1837.

THE IODURETTED-IODIDE OF POTASSIUM,

A DELICATE TEST FOR BICHLORIDE OF MERCURY.

To the Editor of THE LANCET.

SIR:—As every additional test increases the certainty with which we may decide upon the presence of a poison in a suspected liquid, the fact that the liquor potassii iodidi compositus of the New Pharmacopœia will detect one grain of corrosive sublimate in fourteen thousand grains of water, may not prove unacceptable to the readers of your valuable periodical.

My mode of operating is, if the bichloride of mercury be united with gruel, soup, or coffee, to dilute the suspected liquid with water slightly acidulated by hydrochloric (muriatic) acid, and then filter it through animal charcoal. Placing my test-tube upon a sheet of white paper, I carefully drop

into the liquid I wish to examine some of the iodureted solution, allowing it to obey the laws of gravity, and fall to the bottom of the glass. Viewing it by the light reflected from the paper, we shall perceive, if it contains corrosive sublimate, a light clouding over the surface of the brown fluid at the bottom, which gradually increases, and, contrasted with the white paper, is seen to be distinctly a reddish-brown powder, which I am led to suspect is a tritiodide of mercury.

It cannot be too generally known to medical practitioners that the potassii iodidi, kept by the druggists in general, is largely adulterated with the bicarbonate of potash. Twelve samples obtained from as many respectable shops, I found to contain from fifteen to fifty per cent. of this salt. I am, Sir, your obedient servant,

R. Hunt.

32, Newgate-street,
Oct. 24th, 1837.

CREOSOTE IN CHOLERA.

To the Editor of The Lancet.

Sir:—Having seen a statement of the efficacy of creosote in a case of cholera morbus, in The Lancet of September 16th, I was induced to use it in the subjoined case, the result of which induces me to lay it before the profession through the same medium. I may add, that although it has been recommended in the disease alluded to, by experienced practitioners, it has not been generally adopted, and I would, therefore, suggest the publication of such cases wherein it has been, or may be given, with a view to ascertain completely its efficacy in the disease.

Case.—Peter M'Cannon, an Irish reaper, about 40 years of age, was attacked, on the morning of the 8th inst., at 4 o'clock. At 10 I found him affected with vomiting, purging, cramps, cold extremities, and weak voice, the pulse being scarcely perceptible, and the countenance shrunk. His symptoms were of the worst description. I immediately proceeded to use calomel and opium with the other auxiliary remedies, and persevered in their application for two hours without effecting any change. It then occurred to me to add a drop of creosote to each dose of calomel and opium, which I immediately prepared to the extent of three doses. The first dose was given at half-past twelve, but was soon rejected; the second dose shortly afterwards, which was retained for half an hour; and the third dose, given soon after the rejection of the former, was kept for three hours. I have only to add, that by three o'clock reaction had taken place, and the case progressed rapidly and favourably from that time. Thirst and costiveness were the prominent symptoms after that period. I am, Sir, your obedient servant,

E. A. Healey, M.D.

Morpeth, Northumberland,
Oct. 24, 1837.

ON CONTUSION AND CONCUSSION OF THE BRAIN.

The numbers of the "Archives Générales de Médecine," for May, July, and September, contain a well-written memoir on the immediate signs of contusion of the brain, by M. Boinet, interne at the *Hôtel Dieu*, of which the following is a resumé.

The symptoms of contusion of the brain have been hitherto overlooked by the best surgeons, and in the most recent treatises on the art of surgery; or, if mentioned, they have been almost invariably confounded with the symptoms resulting from compression or concussion of that organ. M. Sanson, of the *Hôtel Dieu*, was one of the first to point out that contusion of the brain is *immediately* followed by a certain set of phenomena, which are pathognomonic of the lesion, and which will generally enable us to distinguish it from concussion and compression.

Anatomically considered, contusion of the brain may exist in three forms or degrees. The first is characterised by rupture of the vessels passing from the brain to the dura mater, or from the latter to the cranium, without apparent injury of the cerebral substance. In the second degree we have, in addition, a superficial lesion of the cerebral substance; the grey matter is ecchymosed, but not softened. These two forms admit of cure. In the third degree the substance of the brain is profoundly disorganised; its tissue, in one or more points, is reduced to a detritus in which the grey and white substances are confounded together; the membranes are lacerated, and more or less effusion of blood takes place.

The pathognomonic signs of contusion of the brain are, according to M. Sanson, more or less contracture of the limbs, a constant agitation of the whole body, and loss of consciousness, without the stertorous respiration, occurring *immediately* after the receipt of the injury. In slight cases, however, the contraction of one pupil, or of an eyelid, the spasmodic movement of the lips, or of a single muscle, &c., and difficulty of pronouncing certain words, are the only signs of contusion of the brain which present themselves. As contusion of the brain is almost always produced by external violence inflicted about the region of the head, the symptoms will vary according to the multiplicity or extent of the lesions which result.

If the violence be sufficient to produce fracture of the skull, considerable disorganization of the brain, and effusion, we have all the symptoms of concussion, compression, and contusion, co-existing together. Should the patient survive, the scene changes, and we then observe the symptoms of compression and contusion only. At this stage it is impossible to distinguish the two lesions, because the symptoms of the latter are completely masked by those resulting from effusion into the cerebral substance. In other cases (several of which the author details) we observe imperfect loss of consciousness, slow, but not stertorous breathing, irregular contracture of the upper or lower extremities, the sensibility and motility being conserved; the patient is unable to answer questions, though he seems to understand them; he is in a constant state of agitation; the movements are epileptic, automatic, &c.; the pupils are sometimes dilated, sometimes contracted and insensible to light; one pupil may be strongly contracted, while the other is dilated; the orbicularis palpebrarum acts very irregularly; the excretion of urine and of fæces is not involuntary. Whenever this series of symptoms presents itself, or even certain of these signs, as contracture and agitation, without stertorous respiration, the surgeon may diagnosticate contusion of the brain. The symptoms appear immediately, or very close upon the receipt of the injury, but soon lose their value, if effusion of blood take place. It is principally in complicated cases of this kind that the surgeon, not sufficiently observant, or led astray by the ideas commonly entertained on contusion, may overlook the immediate signs of the latter injury, and refer all the symptoms which his patient presents to the effect of compression alone.

This last, however, our author regards as a circumstance of minor importance, because the effusion of blood which follows cerebral contusion is seldom abundant; the blood is thrown out as a thin layer, rather than *en masse*; it is often in such slight quantity that its existence is only recognised after death, and produces diminution of the faculties rather than loss of motion or sensibility.

The loss of the power of expression by words, either partially or totally, is one of the symptoms of contusion of the brain which does not present itself constantly. This phenomenon, of which M. Boinet records a very striking example, may, perhaps, be explained by the localization of the intellectual faculties. When the lesions of the brain are less extensive than those just alluded to, when a few external vessels are merely ruptured without any laceration of the cerebral substance, the symptoms are less prominent. Frequently the patient complains of nothing but headach; the surgeon, however, should be on his guard against these accidents, apparently trivial, for they sometimes terminate fatally; and it is better to act with energy in the beginning, than to have to deplore a false security when too late. Upon this principle, whenever a patient is brought to the *Hôtel Dieu*, having received a blow, or other injury on the head, M. Sanson is in the habit of having at once recourse to active measures. If the pulse be full, the skin warm, &c., sixteen ounces of blood are taken from the arm, and a large number of leeches placed behind the ears, the head having been shaved, is covered with ice, or cold cloths, and the tartar emetic potion administered. If reaction have not taken place the general bleeding is omitted, but leeches are applied behind the ears, sinapisms to the legs, and a purgative lavement is thrown up. M. Sanson speaks highly of the practice of applying two leeches behind each ear, and repeating this application eight or ten times in the twenty-four hours, thus keeping up a slow and constant drain of blood from the region of the head; active purgatives are at the same time, administered interiorly.

It is to a judicious and persevering employment of these means that M. Sanson attributes the great success which attends his practice, in cases of injury of the head, at the *Hôtel Dieu*.

LAXATIVE PILL.

A Hint for the next Pharmacopœia.—It is acknowledged to be a difficult thing, in many instances, to *regulate* the bowels. The *ext. colocynth. comp.*,—the *pil. aloes et myrrhæ*,—the *pil. rhei comp.*, all, in many cases, fail to do this; besides that they all are apt to induce hæmorrhoids. To supply the consequent deficiency, I beg to draw the attention of the readers of The Lancet to the following admirable formula:—

℞ *Aloes Barbadonsis;*
Extracti glycyrrhizæ;
Saponis Hispanici;
Theriacæ communis.

Solve ex aqua pura; deinde spissa leni calore. Fiat massa.

Signa, *pilula aloes diluta.*

Some six or eight grains may be taken daily, as a dinner-pill, or at bed-time.

I think that this preparation will be found to be more generally useful than those which are at present contained in our Pharmacopœias. It is prepared at Apothecaries' Hall.

M. H.

Cauterisation of the Eye for Amaurosis.—In certain cases of amaurosis, particularly in those where an indication exists for acting on the branches of the fifth pair of nerves, M. Serre, of Montpellier, says he has derived very great advantage from cauterising the surface of the globe with the solid nitrate of silver.—*Bul. Therap.*

DEATH OF DR. MACKINTOSH, OF EDINBURGH.—We regret having to announce the death of Dr. Mackintosh, which took place at Edinburgh on the 28th ultimo, in consequence of typhus fever. Dr. Mackintosh was a zealous labourer in the field of science, and distinguished himself particularly by his active exertions during the prevalence of the cholera in Edinburgh.

UMBILICAL HERNIA, WITH DISCHARGE OF URINE THROUGH THE PERVIOUS URACHUS.

A CHILD, about four weeks old, laboured under umbilical hernia, when the mother remarked a copious discharge of urine from the navel; on examination the surgeon found a hernia, projecting about three quarters of an inch from the navel; at the point of the tumour was an excoriated spot, a quarter of an inch long, and one line broad; this gave out a strong smell of urine. Upon drying and cleaning this part the fluid was seen to issue from several points of its surface, and came away in such quantities, that it wetted a number of cloths in 24 hours. The excretion of urine took place, in a normal manner, from the urethra. The surgeon in attendance returned the hernial sac, and, having covered the excoriated part with some lint, fixed the whole with a cork compress. This had the desired effect. The flow of urine through the urachus was checked, and the hernia cured.—*Medic. Zeit., Berlin*, No. 19, 1837.

AORTITIS, ONE OF THE CAUSES OF ANGINA PECTORIS.

DR. CORRIGAN describes several cases of inflammation occurring about the mouth of the aorta, and the semilunar valves, from which he thinks himself justified in concluding,—

1st. That in some cases of what is called angina pectoris, the paroxysms of dyspnœa, anxiety, mental distress, &c., constituting a fit of angina pectoris, and often supposed to be merely nervous, are really the symptoms of aortitis, or inflammation of the mouth of the aorta.

2. That the treatment, in such cases, is the adoption of local bleeding, counter-irritation, and the exhibition of mercury, which experience has taught to be the medicine best calculated to promote the absorption, or prevent the effusion, of lymph.—*Dublin Journal*, Nov. 1837.

BOOKS RECEIVED.

Sketch of Comparative Anatomy of the Nervous System, &c., by John Anderson, M.E.S. Sherwood and Co. London. 1837. 4to.

Symbolæ ad Talipedem Verum Cognoscendum. Dissert. Inauguralis, W. J. Little. Berlin, 1837.

The Nature and Treatment of Diseases of the Ear, translated from the German of Kramer, by James Risden Bennett, M.D. Longman and Co., London. 1837.

A Treatise on the Influenza of 1837; by Peyton Blakiston, M.A., Med. Lic. Cantab. London: 1837. Longman and Co.

The Flora of Jamaica; a Description of the Plants of that Island, with an Appendix; by James Macfadyen, M.D. Vol. I. London: 1837. Longman and Co.

A Conspectus of the Pharmacopœias of the London, Edinburgh, and Dublin Colleges of Physicians, &c.; by Anthony Todd Thomson, M.D. Tenth edition. London: 1837. Longman and Co.

Embryogenie Comparée, &c.; or, Lectures on Comparative Embryology: delivered at the Jardin des Plantes; by M. Coste. Costes, Paris. 1837.

Leçons sur les Phénomenès Physiques, &c.; or, Lectures on the Physical Phenomena of Life; by M. Magendie. Vol. II. Agné, Paris. 1837.

TO CORRESPONDENTS.

A Correspondent asks us to reconcile a letter of Mr. Marsden, denying the existence of cholera, which that gentleman has addressed to all the morning and evening papers, with the document signed by the surgeons of the Stepney Union. We regard the letter of Mr. Marsden as a bold attempt at puffing himself and the "Free Institution." Our correspondent likewise assures us, that the peregrinations of Mr. Marsden did not extend to Limehouse, and that the latter gentleman did not see or converse with one of the medical men whose opinions he has so officiously contradicted.

We have received a letter signed *A Medical Student*, complaining of an annoyance produced in certain lecture-rooms, by some of the pupils who make it a constant habit of coming into the rooms at various periods after the commencement of the lecture. The application of a remedy for what our correspondent calls an "evil," evidently lies with the lecturer himself.

The letter of *A Student*, on the efficient moral and religious instruction afforded at the medical school of *University College*, is not suited for THE LANCET, although we have no doubt of the correctness of the statements of our correspondent.

The reply of *Dr. Johnson* to Dr. Dickson shall appear in the next LANCET: we were unable to find room for it this week.

Dublin. The letter of *A Licentiate* has been received.

A communication in the next LANCET will render the publication of *Mr. Horne's* letter unnecessary.

The letter of *Mr. Eales* next week.